AMBIENT INFORMATION SYSTEMS

Luksch/Patel

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Manifest

Der Fehler fängt schon an, wenn
einer sich anschickt Keilrahmen
und Leinwand zu kaufen.

MANIFESTO
The mistake begins with the intention to buy stretcher and canvas.

Joseph Beuys 1.11.1985

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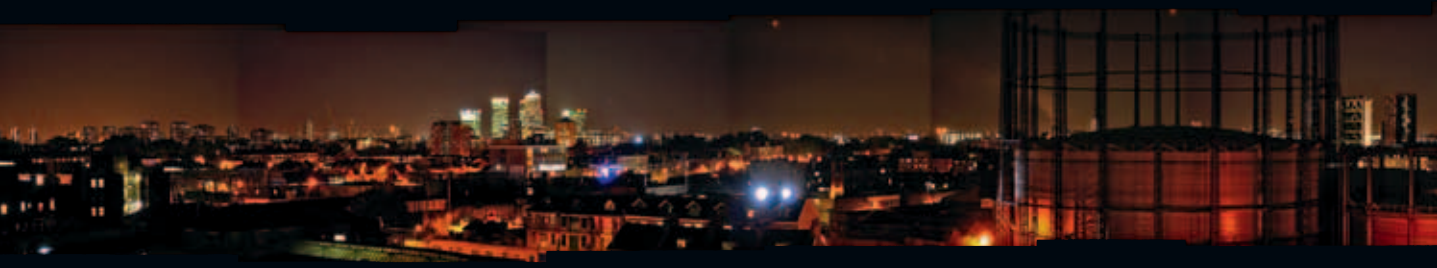
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Ambient Information Systems (AIS) came into being as an intermedia hub and website, www.ambientTV.NET, in 1999, emerging out of founding artist-activist Manu Luksch's interest in extending the medium of film using the Internet. Under her co-directorship with Mukul Patel, it has since developed into a crucible for wider critical, interdisciplinary practice that takes numerous forms – the devising of tools, the creation of frameworks, the instigation of processes.

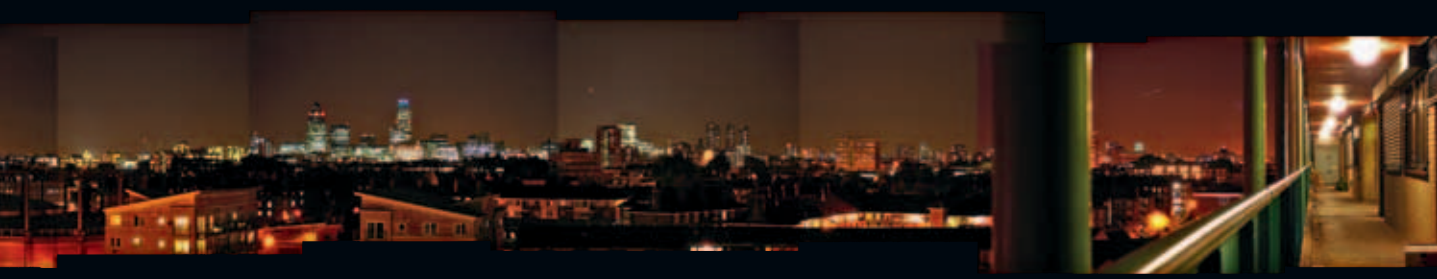
Interrogating the socio-and eco-political transformations of the late 20th and early 21st centuries, this practice bridges art and activism, and recalls aspects of the 1910s-20s avant-garde and 1960s-70s conceptual and systems art. Several works take as medium and object, regimens and technologies of data accumulation and manipulation, including the disciplining of data by the mycelial security industry.

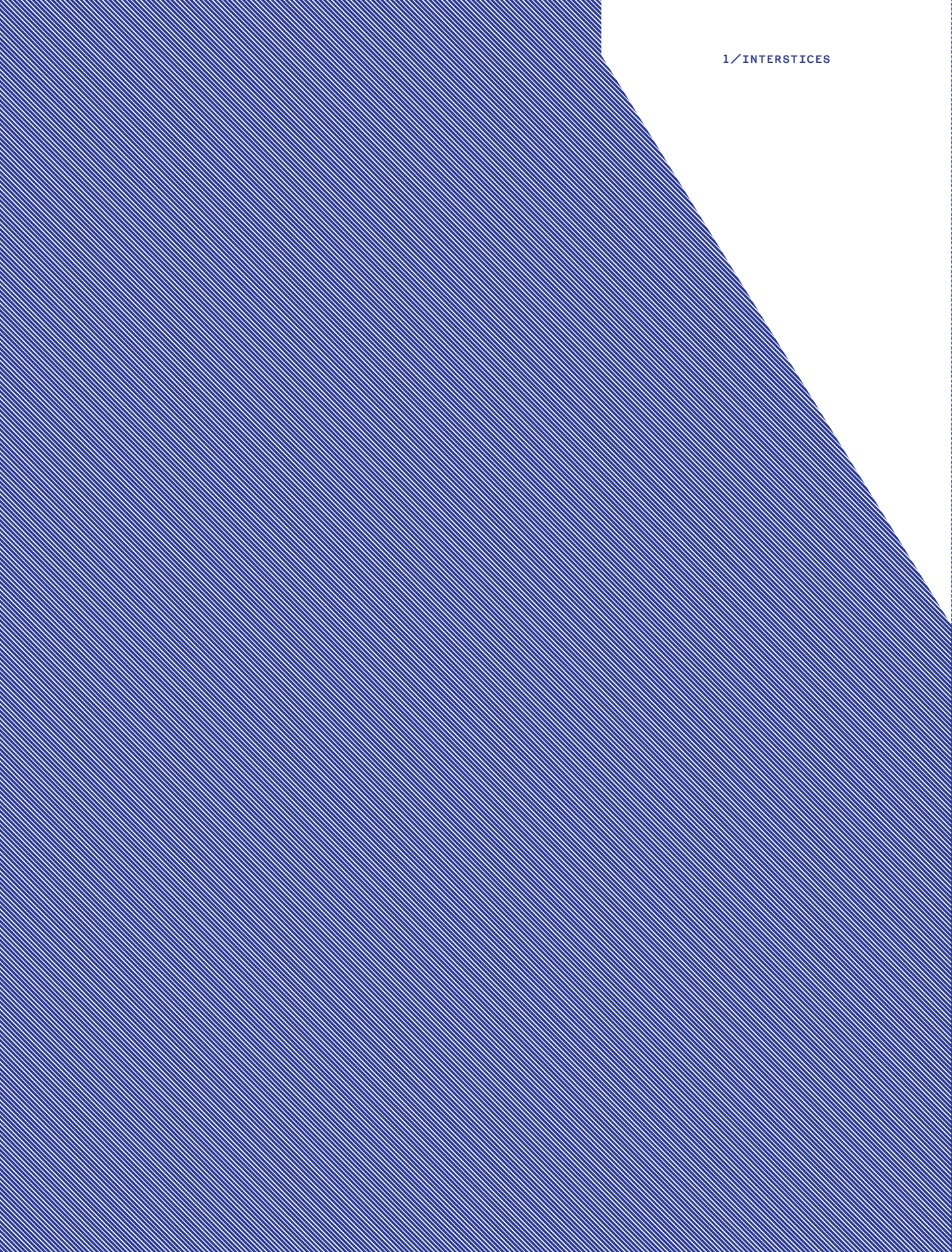


Although these projects grow on an electronic substrate, the interest in regulation extends beyond the digital domain to, for example, the legal status of the image and the language of instruction. Mirroring its objects, AIS persists as a distributed network while also maintaining a node, ambient.space, as studio, workshop, event space, and artist residency in Hackney, East London.

This volume elucidates the work of Manu Luksch, Mukul Patel and collaborators through contextualising essays, artists' writings, documents of projects and curatorial practice, interviews, blogs, recipes, and speculative texts. Each of the 1,500 copies of this edition is uniquely modified by a censor's hand before entering circulation. The act of censorship distributes one of the texts across the individual copies; the obfuscation can be overcome through collective effort.

View from ambient.space, summer 2008
Photo: Anthony Pearson





1/INTERSTICES



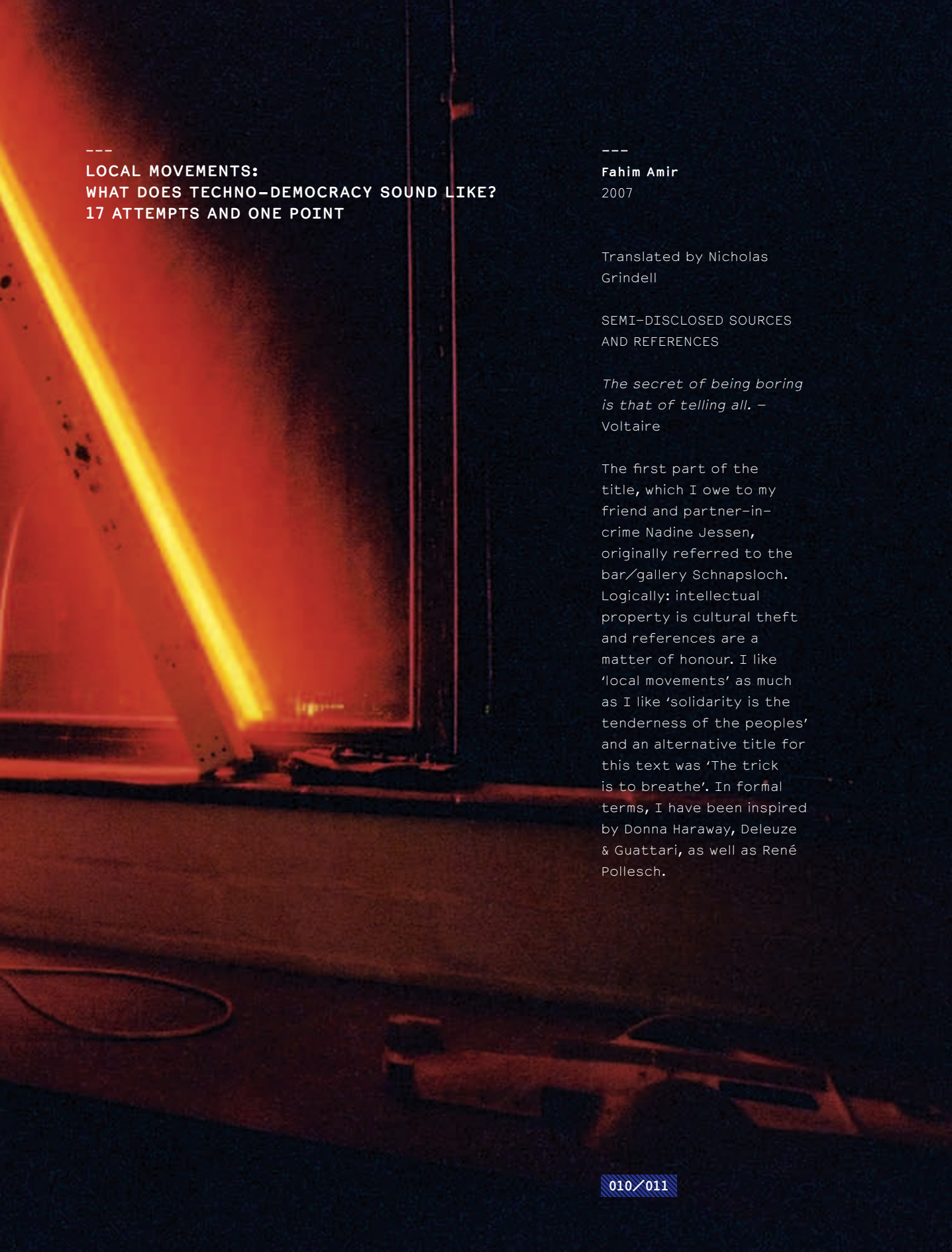
Fahim Amir
2007

LOKALE BEWEGUNGEN: WIE KLINGT TECHNO-DEMOKRATIE? 17 VERSUCHE UND EIN PUNKT

HALBOFFENE QUELLEN UND LESEVERWEISE

„Alles zu sagen, ist das Geheimnis der Langeweile“ — Voltaire

Den ersten Teil des Titels verdanke ich Freundin und partner-in-crime Nadine Jessen, und bezog sich ursprünglich auf das Lokal bzw. die Gallerie Schnapsloch. Logisch: Geistiges Eigentum ist kultureller Diebstahl und Referenzen Ehrensache. „Lokale Bewegungen“ finde ich so schön wie „Solidarität ist die Zärtlichkeit der Völker“ und ein alternativer Titel für den vorliegenden Text war „Der Trick ist zu atmen“. Formal haben mich Donna Haraway, Deleuze & Guattari sowie René Pollesch inspiriert.



LOCAL MOVEMENTS: WHAT DOES TECHNO-DEMOCRACY SOUND LIKE? 17 ATTEMPTS AND ONE POINT

Fahim Amir
2007

Translated by Nicholas Grindell

SEMI-DISCLOSED SOURCES AND REFERENCES

The secret of being boring is that of telling all. – Voltaire

The first part of the title, which I owe to my friend and partner-in-crime Nadine Jessen, originally referred to the bar/gallery Schnapsloch. Logically: intellectual property is cultural theft and references are a matter of honour. I like 'local movements' as much as I like 'solidarity is the tenderness of the peoples' and an alternative title for this text was 'The trick is to breathe'. In formal terms, I have been inspired by Donna Haraway, Deleuze & Guattari, as well as René Pollesch.

[1] Das prekäre Grenz-Regime der gegenwärtigen Techno-Biomacht ist eines der Plateaus auf dem sich die Wellen von Ambient Information Systems entfalten, die Grenzgebiete aufwirbeln, sich es in den Poren gemütlich machen: Trennt oder verbindet die „Schwelle" Räume, gehört das Scharnier zu Türblatt oder Türstock, in welche Richtung schwingt die Tür, wer wird rausgeschwungen? „Illegitime" Vermischungen stülpen die Kamera-Linse ins Ohr, was rauskommt ist Klang, der buchstäblich unter die Haut gehen kann. Sie wuchern von dieser verrauschten Ebene auf den baumo-logischen Zweig der Aufklärung zurück, die schmutzige Kind-Greisin ohne die wir nicht können. Remember: Alles kann eine Waffe sein, es kommt nur darauf an, wie man es hält.

Was die Bedeutung von „Scharnieren" angeht vgl. zahlreiche Texte von Jacques Derrida wie zum Beispiel *Marx' Gespenster*.

Giorgio Agamben sind viele Reflexionen zur „Schwelle" zu verdanken, die sich durch fast sein gesamtes Werk ziehen, in diesem Graubereich ist der italienische Heidegger-Schüler mit operaistischer Prägung zuhause. Lesen hilft, manchmal zumindest.

Zur Kritik an der Aufklärung spannt sich ein Kosmos auf, Eingänge ins Labyrinth zu uns selbst bietet die klassische *Dialektik der Aufklärung* (Max Horkheimer/Theodor W. Adorno) genauso wie Lorraine Code (*What Can She Know?*). Beachte auch, dass Foucault seine Arbeit als „Kritik der schmutzigen Vernunft" bezeichnete. So viele Fragen- und Antwort-versuche in diesem Feld, verweisen darauf, dass der Widerspruch nicht im Begriff, sondern in der Welt liegt. Selbstverständlich nicht im ahistorischen Sinn, sondern als konkrete Phänomene der Moderne und des Kapitalismus. Sido: „Scheiß auf die ewigen Fragen, vor dem Richter stehen und nichts sagen." (Aus dem Album *Ich*, erschienen im Dezember 2006 bei Aggro Berlin).



[1] Does a 'threshold' separate or connect spaces, is the hinge part of the door or part of the frame, which way does the door swing, who is swung out? The precarious liminal regime of today's techno-bio power is one of the plateaus over which Ambient Information Systems makes waves, stirring up borderlands of the medium and and settling down in the pores. 'Illegitimate' mixtures turn the camera lens into the ear, the result being sounds that can quite literally get under your skin. From this distortion-laden level, they romp back to the dendrological branch of the Enlightenment, the dirty child-granny we can't do without. Remember: anything can be a weapon, it just depends how you hold it.

As a theme running through most of his work, Giorgio Agamben has reflected richly on the 'threshold', a grey zone where this Italian student of Heidegger with his labour movement roots is quite at home. Reading helps, at least sometimes.

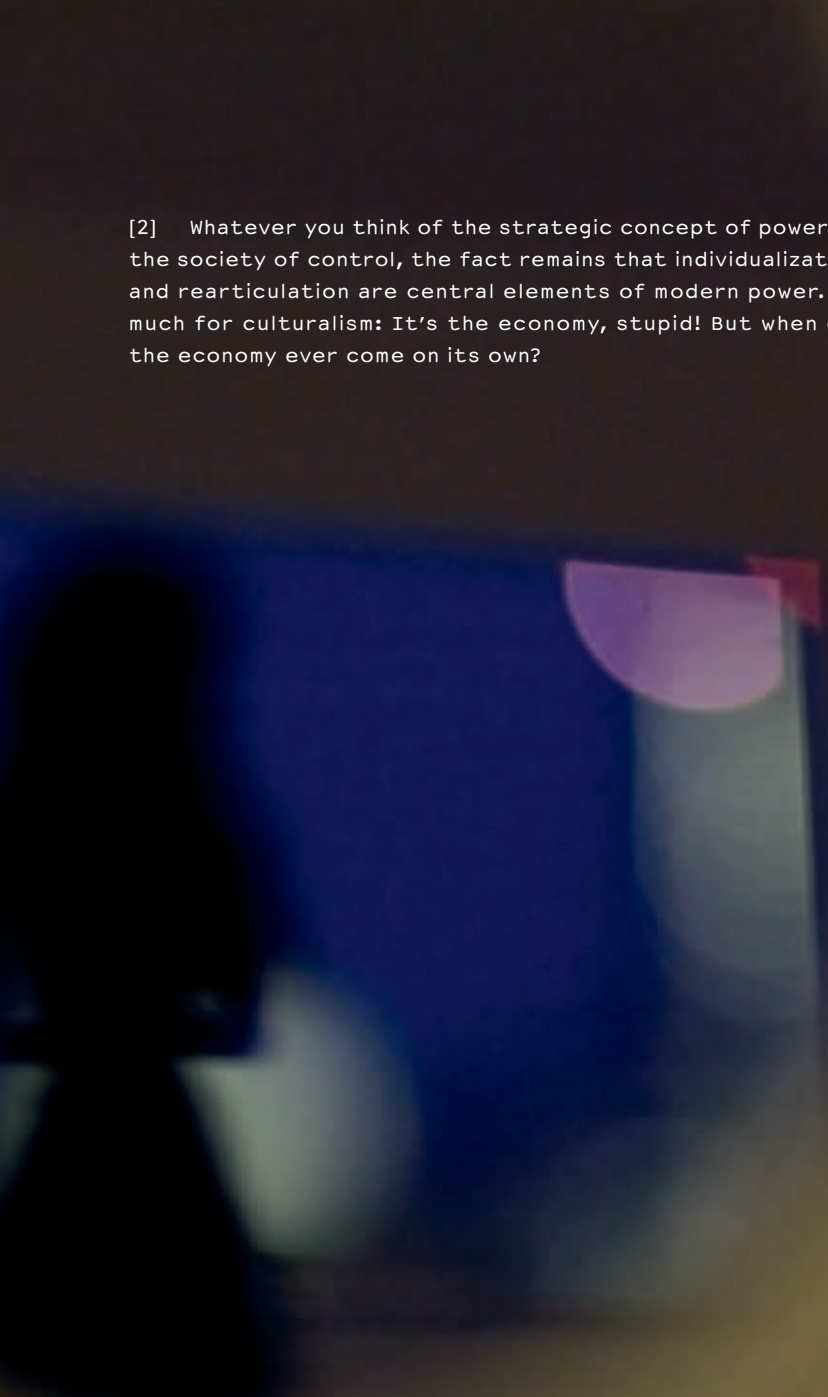
Concerning the meaning of 'hinges/hinging', see many texts by Jacques Derrida, e.g. *Spectres of Marx*.

Critiques of Enlightenment constitute their own cosmos, with entrances to the labyrinth of our selves offered by the classic *Dialectic of Enlightenment* (Max Horkheimer & Theodor W. Adorno) as well as by Lorraine Code (*What Can She Know?*). Note also that Foucault referred to his work as 'critique of dirty reason'. The sheer number of questions put forward in this field suggests that the contradiction lies not in the concept but in the world – not in the ahistorical sense, but as a concrete phenomenon of modernity and capitalism. In the words of the rapper Sido: 'Scheiß auf die ewigen Fragen, vor dem Richter stehen und nichts sagen' ('Fuck the never-ending questions, stand in the dock and say nothing'), from the album *Ich*, on Aggro Berlin (2006).

[2] Strategischer Machtbegriff hin, Kontrollgesellschaft her, jedenfalls gilt: Vereinzelnung und Re-Artikulation sind zentrale Elemente moderner Herrschaft. Allem Kulturalismus zum Trotz: It's the economy, stupid! Aber wann wäre die schon alleine gekommen?

Zum strategischen Machtbegriff des französische Philosophen Michel Foucault, siehe beispielsweise *Eine Kritik der politischen Vernunft* (Thomas Lemke), zur Diskussion um Kontrollgesellschaft den Primärtext *Postscriptum zur Kontrollgesellschaft* (Gilles Deleuze).

[2] Whatever you think of the strategic concept of power or the society of control, the fact remains that individualization and rearticulation are central elements of modern power. So much for culturalism: It's the economy, stupid! But when did the economy ever come on its own?



For an introduction into the strategic concept of power by French philosopher Michel Foucault, see for example Thomas Lemke's *Eine Kritik der politischen Vernunft* (*Critique of Political Reason*); on the discussion of societies of control, see the primary text *Postscript on the Societies of Control* (Gilles Deleuze). Foucault tried to show that modernity was also about the production of subjects in certain institutions of normative discipline (school, military, factory); Deleuze argued that in our time we never leave these institions because they become part of a general pattern, e.g. instead of finishing school at a certain age, we are confronted nowadays with the concept of 'lifelong learning'.

[3] Die ungleichzeitige und kombinierte Entwicklung von Technologien und Gesellschaftsformationen bringt die Stadttheorie der Chicago-School zum Einsturz und reiht Cyberabad (Hyderabad/Indien) und KL (gesprochen wie Englisch: Kay El = Kuala Lumpur/Malaysien) vor industrielle Nuklei des Ruhrgebiets, von Detroit schon länger und der gesamten Ukraine seit einer Weile.

[3] The asynchronous development of social formations conflicts with the globally simultaneous deployment of new technologies, collapsing the urban theory of the Chicago School. Cyberabad (Hyderabad, India) and KL (Kuala Lumpur, Malaysia) rank ahead of the industrial nuclei of the Ruhr Valley; the same has long since applied to Detroit, and the whole of Ukraine for quite a while, too.

[4] Das gefaltete Subjekt des InfoBiotech-Kapitalismus, dem scheinbar die reele Subsumption von abstrakter (Kommunikation, Informatik, Logistik, Symbolzuschneidung im weitesten Sinn) und affektiver Arbeit (Liebe in Zeiten von Hedgefonds, globale Betreuungsketten migrantischer Pflege- und Hegekräfte) gelungen ist, wird dabei entknittert, und die Spuren zum Leuchten gebracht: Gespenster von Befreiung, Referenzen auf vergangene Kämpfe, der Kontinent der Geschichte. Seine „dunklen" Stellen sind dabei mit der gleichen Berechtigung das Versprechen Haiti genauso wie der Rhythmus des Capoeira.

Die These von der kombinierten Isolierung/Atomisierung („Individuum", „Mensch an sich", usw.) und Neu-Zusammensetzung (Nation, „Rasse", usw.) als wichtiger Herrschaftspraxis der Moderne ist beim griechisch-französischen Theoretiker Nicos Poulantzas (z.B. *Classes in Contemporary Capitalism*) nachzulesen. Poulantzas war für die Herausbildung der wirtschaftstheoretischen Regulations-Schule um Michel Aglietta wichtig, der wir den Begriff „Post-fordismus" mitzuverdanken haben, einem Begriff der als Ausweis für kritische Positionen gilt und die Veränderungen der letzten 30-40 Jahre analytisch hochpusht.

Mit InfoBiotech- bzw. BioInfocom-Kapitalismus wird das Ergebnis des verstärkten Kapitalflusses in die Bereiche „Leben" und „Kommunikation" gemeint, der seit dem weltweiten Fall der Profitraten ab Mitte der 70er eingesetzt hat. Als „höchte" Manifestation gelten die LifeSciences bzw. LifeIndustries, um deren Ansiedlung Stadträte und Minister global buhlen. Computer+Biotechnologie =? Die These vom „Post-fordismus", in dem wir angeblich leben ist weitaus umstrittener als der erste Blick verrät, mittlerweile gibt es mindestens vier unterschiedliche Schulen mit teil widersprüchlichen Prämissen und Schluss-folgerungen. Für eine frühe Auseinandersetzung mit den methodischen Doppelböden dieser Strömungen, siehe Brenner, Robert/Glick, Mark: „The Regulation Approach. Theory and History", in: *New Left Review*, I/188, July-August 1991.

Zur veränderten Konzeptionalisierung von „Arbeit" in rezenten Debatten siehe das sehr einflussreiche und m. E. größtenteils irreführende Werk *Empire* (Michael Hardt /Toni Negri), und zur Bedeutung affektiver Arbeit für die moderne Wirtschaft das weitaus lesenswertere *The Managed Heart* (Arlie R. Hochschild), Lächeln ist Arbeit.

[4] In the process, the manifold subject of info-biotech capitalism, who has apparently succeeded in actually subsuming abstract work (communications, computer science, logistics, sign processing in the broadest sense) and affective work (love in the age of hedge funds, global chains of migrant care workers), is unfolded – ironed out – and the traces made to shine: ghosts of liberation, references to past struggles, the continent of history. Its dark spots are just as much the promise of Haiti as the rhythm of capoeira.

The idea of isolation/atomization ('individual', 'homme-en-soi', etc.) plus recombination (nation, 'race', etc.) as an important modern practice in the exercise of power can be found in the works of the Franco-Greek theorist Nicos Poulantzas (e.g. *Classes in Contemporary Capitalism*). Poulantzas was an important influence on the formation of the Regulation School in economic theory centred on Michel Aglietta, to whom we own the term 'post-Fordism', a concept that counts as a guarantor of 'critical' positions and which attempts to grasp the changes of the past 30–40 years.

The term info-biotech (or bio-infocom) capitalism is used to refer to the result of increased flows of capital in the fields of 'life' and 'communication' that has taken place since the worldwide fall in profit rates since the mid-70s. The 'highest' manifestation of this is considered to be the life sciences and life industries, whose institutions are courted by ministers and city officials the world over. Computer + biotechnology = ? The condition of post-Fordism under which we are supposedly living is far more controversial than it appears at first glance – there are now at least four different schools with partly conflicting premises and conclusions. For an early study of the methodological ambiguities of these currents, see Robert Brenner & Mark Glick: 'The Regulation Approach. Theory and History' in: *New Left Review*, I/188, July–August 1991.

On altered conceptualizations of labour in recent debates, see the highly influential (and in my view largely misleading) work *Empire* (Michael Hardt & Toni Negri); and on the role of affective work in modern business see the far more worthwhile *The Managed Heart* (Arlie R. Hochschild). Smiling is work.



[5] Wenn mit Althusser gefordert werden kann, dass Parolen so lang sein sollen, dass sie in eine „hohle Hand“ passen, dann genügt ein Manifest der mikropolitischen Tätigkeit dieser Bedingung: alles andere außer sich zur Performance werden zu lassen.

Das Althusser-Zitat habe ich aus: Robert, Pfaller „Comdedy and Materialism“, S. 251–283 in: Robert Pfaller (Ed.) *Stop that Comedy! On the Subtle Hegemony of the Tragic in Our Culture*. (Wien: Soderzahl 2005), S. 251.

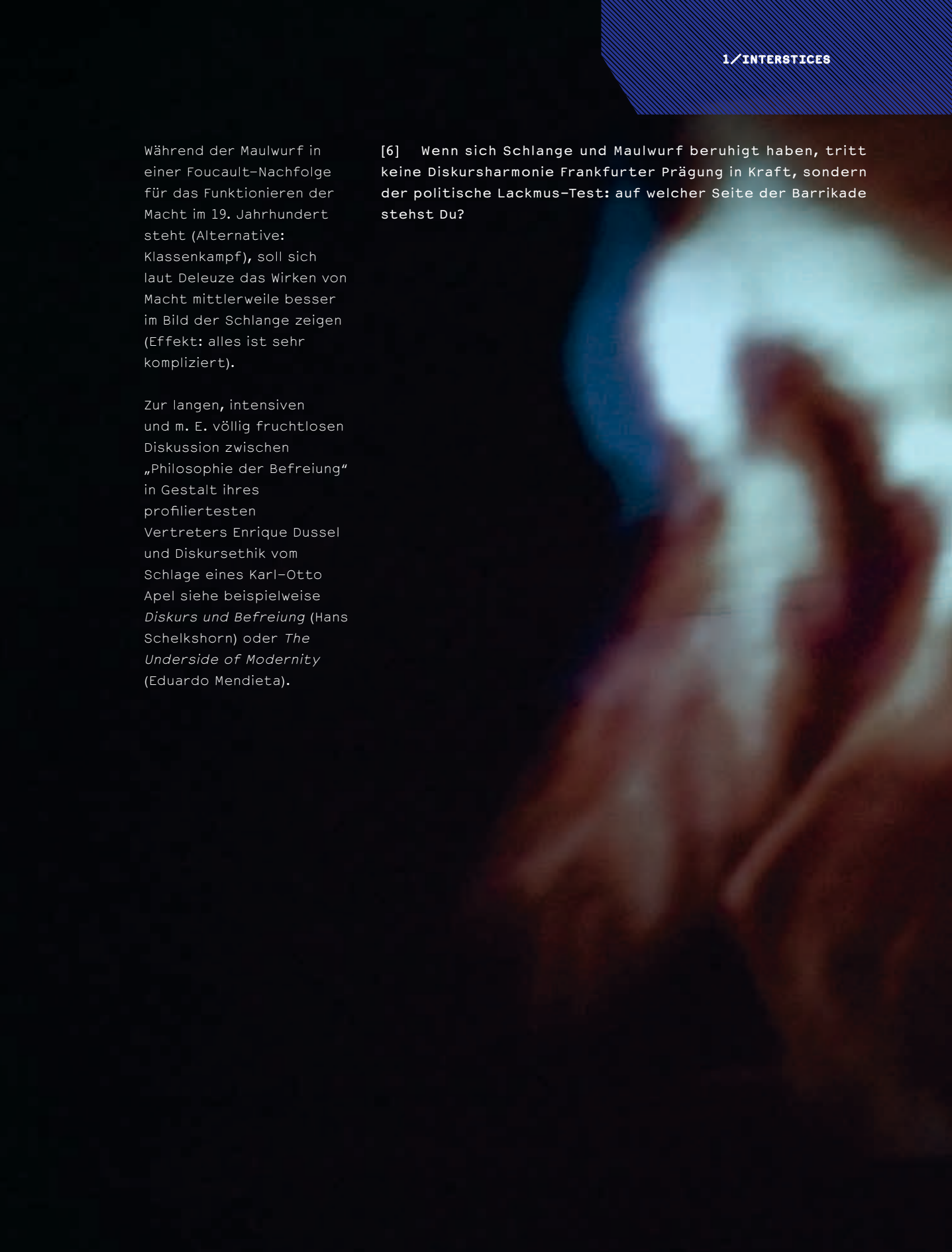
[5] If, with Althusser, one demands that slogans should be short enough to fit into a 'hollow hand', then a manifesto of micro-political activity satisfies this requirement: turn everything except yourself into a performance.

The Althusser quote is taken from Robert Pfaller 'Comedy and Materialism', p. 251–283, in: Robert Pfaller (Ed.) *Stop that Comedy! On the Subtle Hegemony of the Tragic in Our Culture*. (Vienna: Soderzahl 2005), p. 251.

Während der Maulwurf in einer Foucault-Nachfolge für das Funktionieren der Macht im 19. Jahrhundert steht (Alternative: Klassenkampf), soll sich laut Deleuze das Wirken von Macht mittlerweile besser im Bild der Schlange zeigen (Effekt: alles ist sehr kompliziert).

Zur langen, intensiven und m. E. völlig fruchtlosen Diskussion zwischen „Philosophie der Befreiung" in Gestalt ihres profiliertesten Vertreters Enrique Dussel und Diskursethik vom Schlage eines Karl-Otto Apel siehe beispielweise *Diskurs und Befreiung* (Hans Schelkshorn) oder *The Underside of Modernity* (Eduardo Mendieta).

[6] Wenn sich Schlange und Maulwurf beruhigt haben, tritt keine Diskursharmonie Frankfurter Prägung in Kraft, sondern der politische Lackmus-Test: auf welcher Seite der Barrikade stehst Du?

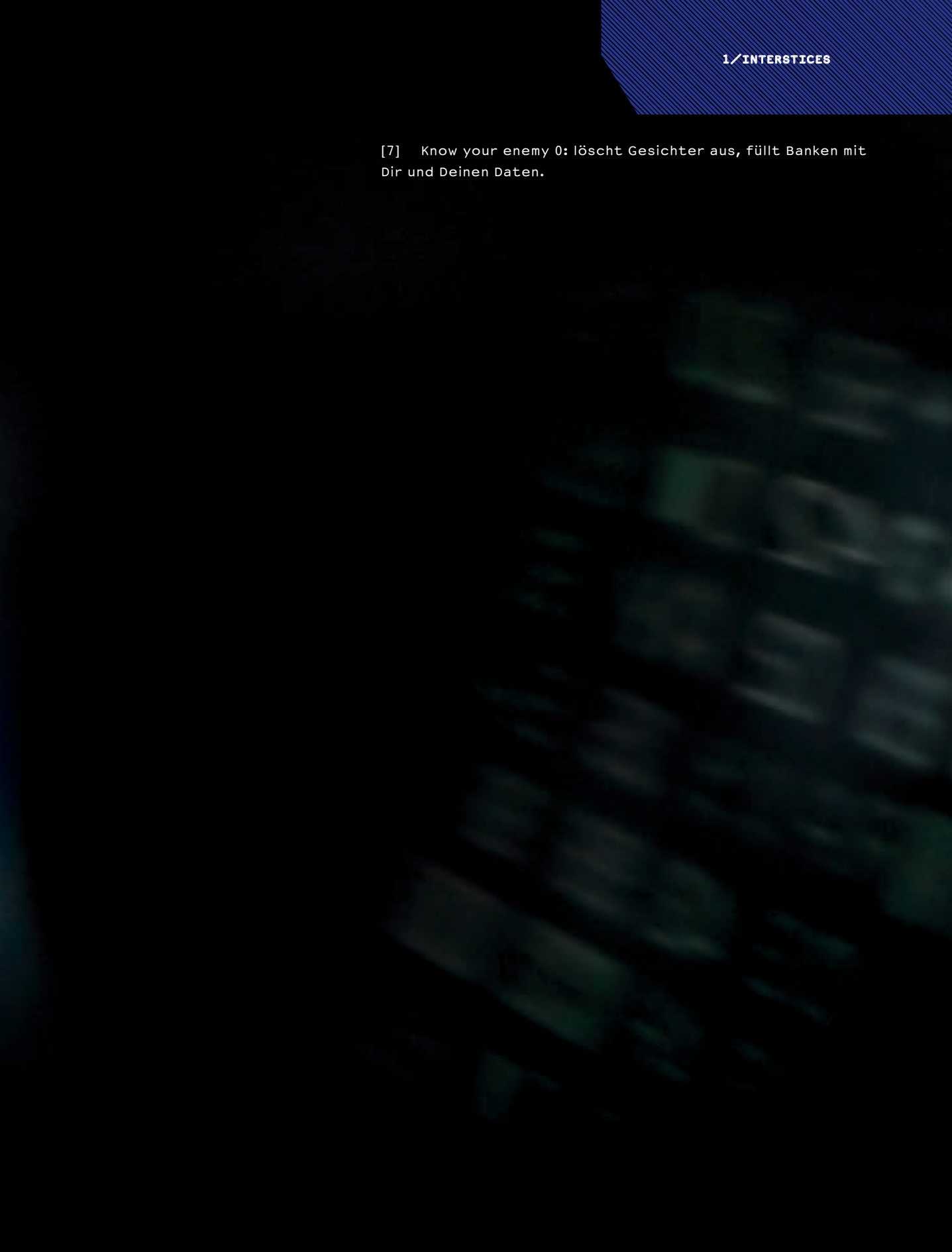


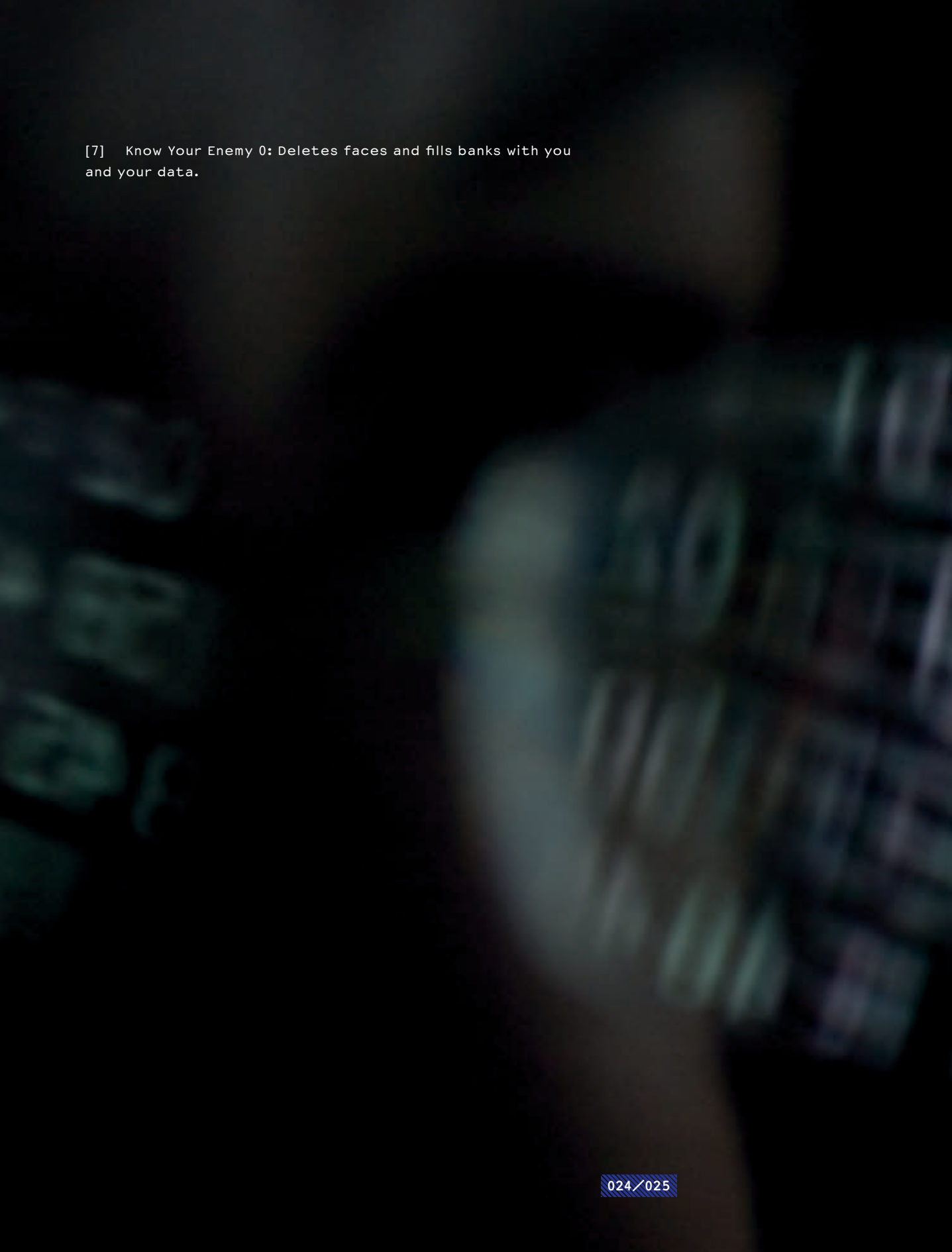
[6] When the snake and the mole have calmed down, what comes next is not discursive harmony in the style of the Frankfurt School, but the political litmus test: Which side of the barricade are you standing on?

While the mole is a Foucauldian image for the functioning of power in the 19th century (the alternative being class struggle), according to Deleuze, the way power works is now better described using the image of the snake (effect: everything is very complicated).

On the long, intense, and – in my opinion – totally fruitless discussion between liberation theology in the form of its highest-profile proponent Enrique Dussel and discourse ethics from the likes of Karl-Otto Apel, see for example *Diskurs und Befreiung* (Hans Schelkshorn) or *The Underside of Modernity* (Eduardo Mendieta).

[7] Know your enemy 0: löscht Gesichter aus, füllt Banken mit Dir und Deinen Daten.





[7] Know Your Enemy 0: Deletes faces and fills banks with you and your data.

Napoléon III. hatte Georges-Eugène Haussmann, wir stehen vor dem global suburb, siehe zu ersterem z.B. *Die Neuerschaffung von Paris* (David Jordan), zu letzterem z.B. die Arbeiten von ambientTV.NET.

Zur bolschewistischen Feder, siehe die bislang unübertroffene Trotzki-Biographie von Pierre Broué, zu den Existenzbedingungen von mehr als 12% der Menschheit siehe *Planet of Slums* (Mike Davis).

[8] Die Haussmanisierung wird ins Binäre übersetzt und zwei Ziffern rasen um die Welt. Um ein Bild aus der „Feder" der russischen Revolution zu leihen: unsere Situation ist wie eine Kugel auf der Spitze einer Pyramide, sie kann nur in zwei Richtungen fallen,
a) die des Monsters: technologisch gestützte Ausstopfung mit Herrschaft, eingespannt in Ausbeutung. Gleichgültig ob wir es uns in der Unterdrückung bequem machen können oder nicht, jeder 8. Mensch auf der Welt lebt im Slum, die anderen werden zwischen Tittytainment-Gehege und Exportsubventionszone hin und her geschoben.
b) Die technische Einrichtung der besten aller möglichen Welten wird fortgesetzt. Seit Hegel versucht das Bürgertum das Ende der Geschichte auszurufen, Francis Fukuyama ist dabei eher eine hässliche aber laute Kröte im süßlichen Burggraben von dicken round tables. Das Narrativ vom Ende des Narrativs wird hochgeladen, die Performance bleibt mangelhaft bis unüberzeugend. Einwand: eine Pyramide hat nicht nur zwei Seiten.

[8] Haussmanization is translated into binary terms and two digits race round the world. To borrow an image from the pen of the Russian revolution: our situation is like a ball balanced on the top of a pyramid, it can only go in one of two directions.
a) the way of the monster, technologically power-bloated, co-opted for exploitation – whether or not we can make our peace with repression, every eighth person on earth lives in a slum, the others will be shifted back and forth between the tittytainment enclosure and the export subsidy zone.
b) the technical establishment of the best of all possible worlds continues – since Hegel, the bourgeoisie has been attempting to declare the end of history, Francis Fukuyama being the most recent toad to croak in the sickly-sweet moat that rims the roundtables of the obese. The narrative of the end of narratives is uploaded, the performance remains faulted and unconvincing. Objection: a pyramid has more than two sides.

Napoleon III had Georges-Eugène Haussmann, we face the global suburb: on the former, see, for example, *Transforming Paris* (David Jordan), on the latter, for example, the work of ambientTV.NET.

On the Bolshevist pen, see the unsurpassed Trotsky biography by Pierre Broué; on the living conditions of more than 12% of humanity, see *Planet of Slums* (Mike Davis).



[9] PoPo-Moderne: Ambiguität ist Teil des Konkreten, im Reich der Zwecke und formaler Logik sieht es zweifellos aufgeräumter aus, der erste Blick trügt auch hier. Die Post-Post-Moderne ist keine zweite, sondern eine weiterhin kooptierende Maschine, der es gelingt sich als funktionstüchtig auszustellen. Das bedeutet Fallgruben, Sackgassen, Spiegelkabinette, aber auch Felder für Selbstermächtigung und Interventionsräume für die Verhandlung und Erstreitung von Existentiellem. Ein Slogan aus einem US-ArbeiterInnen-Streik aus dem letzten Jahrhundert weist einen Weg: „We want bread, but we want roses too!“



[9] POPOMO: Ambiguity is part of the concrete; in the realm of purposes and formal logic things doubtless look tidier; here too, first impressions are deceptive. Post-postmodernism is not a second coming, but an unbroken co-opting machine that manages to present itself as capable of functioning. This means pitfalls, dead ends, halls of mirrors – but also fields for self-empowerment and spheres for intervention where existential issues can be negotiated and fought for. A slogan by striking American women from the last century indicates one path: 'We want bread, but we want roses too!'



[10] Technologie bringt seine eigenen Andockstellen mit, der Ausdruck „materielle Semiotik" ist deshalb schlüssig, sie fällt aber weder vom Himmel, noch besitzt sie immanent einen politischen Vektor. Technologie selbst ist weder gut noch schlecht, neutral ist sie aber noch weniger.



[10] Technology provides its own docking points, hence the logic of ‘material semiotics’. It neither falls from the sky, nor does it possess an immanently political dimension. Technology itself is neither good nor bad, but neither is it in any way neutral.

The term ‘material semiotics’ is used by Donna Haraway for information or meaning that refers to the body; in the analysis of the theory of Bruno Latour, it refers to the observation that the technological means through which data is obtained is a co-producer of meaning, but like the cyborg (a nephew of the arms race, intended as a weapon), it can be used as an emancipatory metaphor as well. Haraway forcefully criticised the technophobia of the early feminist movement and tried to show that no technology is inherently good or bad, but opens and closes certain possibilities of use and interaction.

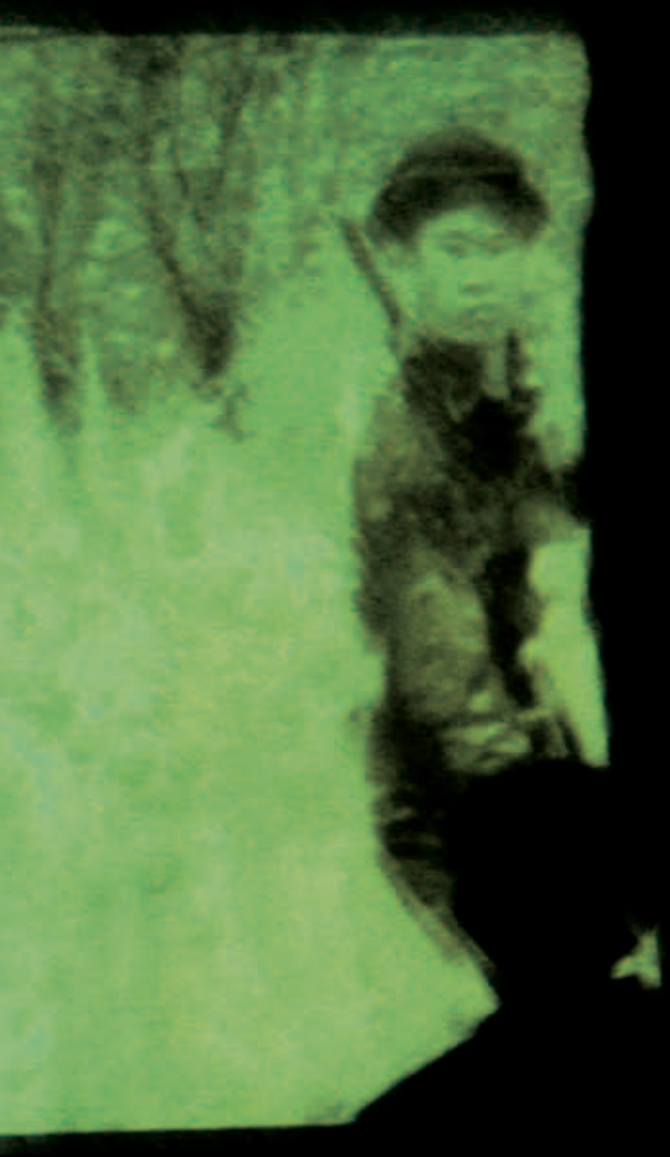
Als theoretisch versierten und empirisch reichen Einstieg in die Diskussion um Gegen-Moderne, Oralität, Widerstand, Karneval und Wien, siehe *Die Anarchie der Vorstadt* (Maderthaner/Musner).

[11] Oralität ist traditionell ein Erbe der Peripherien rund um die Zentren der modernen Welt, die Schrift ein Instrument der Metropolen. Ebenso wie die Aufklärung von oben, in Österreich: „Josephinismus", emanzipatorische Effekte in ausbeuterischer Absicht zeitigte, tut dies der realexistierende Kapitalismus heute.



[11] Traditionally speaking, orality is a legacy from the peripheries of the modern world, writing an instrument of the metropolises at its centre. Just as Josephinism (Enlightenment imposed from above with exploitative intent) triggered emancipatory effects, so the same occurs today under real-existing capitalism.

As a theoretically well-founded and empirically rich introduction to the discussion of anti-modernity, orality, resistance, carnival and Vienna, see *Die Anarchie der Vorstadt* (Maderthaner/Musner).





Das Beispiel mit dem Stealth-Bomber ist dem Vorwort von *The Algebra of Revolution* (John Rees) entnommen, stimmige Orthodox-Dialektik mit Niveau.

[12] Dialektik auf Augenhöhe mit Michael Moores Baseball-Kappe: ein Stealthbomber ist sein dreifaches Gewicht in Gold wert und die Hälfte alle Ingenieure und NaturwissenschaftlerInnen in den USA arbeitet direkt oder indirekt für die militärische Forschung. Vergleiche die hier vorliegende Größenordnung mit beispielsweise den weltweiten Ausgaben für Alphabetisierungskampagnen oder leicht heilbaren, aber in vielen Gegenden der Welt nichtsdestotrotz tödlich verlaufenden Krankheiten, oder auch globalen Ausgaben für Bleichungsmittel für Haut und Haar.

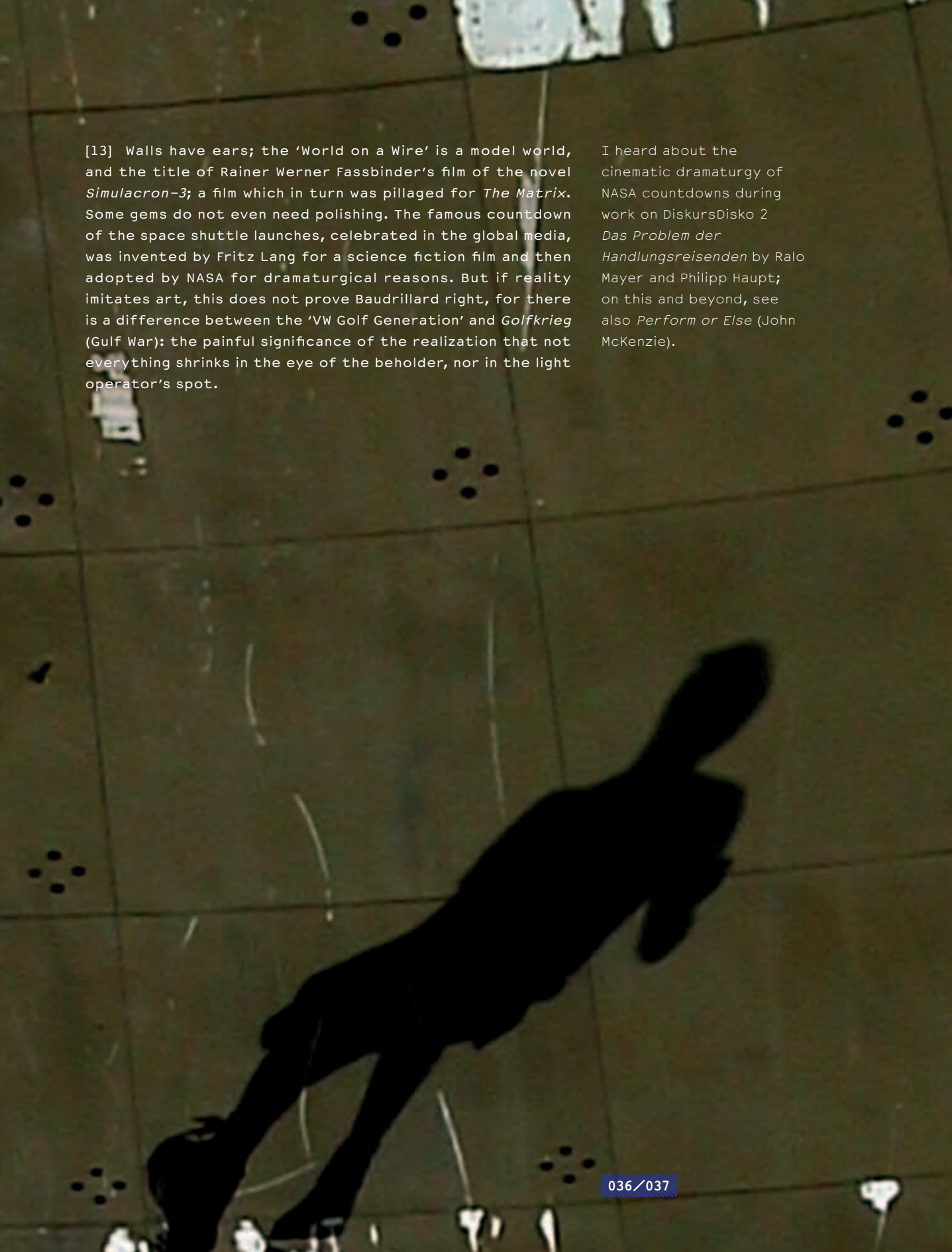


[12] Dialectics on a level with Michael Moore's baseball cap: a stealth bomber is worth three times its weight in gold, and half of all the engineers and natural scientists in the USA work directly or indirectly for military research. Compare this scale of operations, for example, with global expenditure on alphabetisation campaigns or easily curable diseases that are still fatal in many parts of the world, or with global expenditure on bleaching products for skin and hair.

The example with the stealth bomber is taken from the preface to *The Algebra of Revolution* (John Rees), high-quality orthodox dialectics.

Von der Filmdramaturgie der NASA-Countdowns habe ich bei der Arbeit an DiskursDisko 2 D*as Problem der Handlungsreisenden* von Ralo Mayer und Philipp Haupt erfahren, siehe dazu und darüber hinaus *Perform or Else* (John McKenzie).

[13] Der Feind hört mit, die „Welt am Draht" ist eine Modellwelt, *Simulacron-3* die Romanvorlage zu Rainer Werner Fassbinders genanntem Film, dieser wiederum Bergwerk für *Matrix*. Manche Gemmen muss man nicht mal schleifen. Der berühmte Countdown der medial weltweit zelebrierten Space-Shuttle-Starts ist eine Erfindung Fritz Langs für einen Science Fiction-Film, den die NASA aus dramaturgischen Gründen übernommen hat. Wenn also Realität Kunst nachahmt, hat Baudrillard deshalb noch lange nicht Recht, denn zwischen „Generation Golf" und „Golfkrieg" besteht ein Unterschied: die schmerzhafte Bedeutung der Einsicht, dass nicht alles im Auge des Betrachters zusammen schrumpft, auch nicht im Spot des Lichtmeisters.



[13] Walls have ears; the 'World on a Wire' is a model world, and the title of Rainer Werner Fassbinder's film of the novel *Simulacron-3*; a film which in turn was pillaged for *The Matrix*. Some gems do not even need polishing. The famous countdown of the space shuttle launches, celebrated in the global media, was invented by Fritz Lang for a science fiction film and then adopted by NASA for dramaturgical reasons. But if reality imitates art, this does not prove Baudrillard right, for there is a difference between the 'VW Golf Generation' and *Golfkrieg* (Gulf War): the painful significance of the realization that not everything shrinks in the eye of the beholder, nor in the light operator's spot.

I heard about the cinematic dramaturgy of NASA countdowns during work on DiskursDisko 2 *Das Problem der Handlungsreisenden* by Ralo Mayer and Philipp Haupt; on this and beyond, see also *Perform or Else* (John McKenzie).



[14] Stalin & Co haben kein Monopol auf Sowjetschüsseln. Ein Freundeskreis zeigt vor, was die Revolution der Bärte bedeutet: jetzt werden Köpfe Rollen, weil andere an die Töpfe wollen. Der Kopf des Königs ist immer noch nicht gefallen, vielleicht weil er mehr als einen hat? Nachgehackt: Wäre Tatlin für die Demokratisierung des Klangs, der Bewegung und des Wissens und ihrer Produktion eingetreten? Wer für Absetzung der Darstellungsbeamten ist, muss auch das Hören demokratisieren. Beim Sozialismus sind wir da noch lange nicht angelangt. Er besteht übrigens auch nicht aus 500 Fernsehkanälen, die dann endlich alle empfangen können.



[14] Stalin & Co. do not have a monopoly on Soviet dishes. A circle of friends demonstrates the meaning of the bearded revolution: now heads will roll because others want a share of the pie. The king's head is still on his shoulders, perhaps because he has more than one? Hack again: Would Tatlin have campaigned for a democratisation of sound, of movement, of knowledge and knowledge production? If you want to divest civil servants of their farcical stages, you have to democratize listening too. This is still a far cry from Socialism. And so is 500 TV channels accessible to all.

The 'circle of friends' is the German hip hop group Freundeskreis, their song 'Revolution der Bärte' offers a vision of what revolution could mean today.



[15] Know your enemy 1: Lenin meinte bekanntlich, er lese „lieber einen klugen Bürgerlichen als einen schlechten Marxisten.“ Was bedeutet dies für den taktischen und strategischen Einsatz von Medien, Technologien und Identitätsangeboten?

[15] Know Your Enemy 1: of Lenin it is known that he would ‘rather read a clever bourgeois than a bad Marxist.’ What does this mean for the tactical and strategic deployment of media, technologies and potential identities?

[16] Auch wenn nur zu „reagieren“ abstrakt unschöpferisch sein mag, ist es die Form in der dies geschieht zweifellos nicht immer. Als mentale Partitur mit offenem Ausgang für den Denkprozess kann ein japanisches Wort dienen: „Jutsu“ bedeutet Kunst oder Kunstgriff. Jujutsu ist demnach die Kunst der Kraft des Gegners nachzugeben und sie somit ins Leere zu leiten. Heterotope Schiffe bauen wir sowieso. Zwischen geistiger und körperlicher Existenzsicherung im hier und heute und dem was tatsächliche Emanzipation sein kann, herrscht kein Widerspruch und ist auch kein Minimax-Programm zur vermeintlichen Vermittlung/Verdichtung nötig, es handelt sich aber trotzdem um unterschiedliche, die sich in Situationen strategischer Relevanz manifest berühren, strukturell sind sie sowieso verbunden.



[16] Even if merely reacting could be called uncreative, the same certainly cannot always be said of the form this reaction takes. A mental score for open-ended thinking can be described using the Japanese word 'jutsu', meaning art or trick. Jujutsu is the art of ceding to an opponent's force, to divert it into an abyss. And in any case, the ships we build are heterotopic. There need not be a contradiction between the securing of our psychic and physical existence in the here and now, and what emancipation could actually mean, nor is there any need for a minimax program of supposed 'mediation' (Hegel) or 'condensation' (Freud). Nonetheless, they are different – although they manifestly come together in situations of strategic relevance, and in structural terms they are linked in any case.

The problem starts with the separation itself.

The term 'minimax' was used to describe the early tendency of the German Social Democrats to concentrate in daily activism on the 'minimal program' of reformism and neglect the 'maximum program' of revolution. (It means something rather different as a criterion in decision theory.)

[17] Manches bleibt dabei schlichtwegs schön ohne stumpf zu werden oder im Stahlbad der Fun-Industrie verarbeitet zu werden, ohne warenästhetische Abgleitflächen runter zu rutschen oder Ausbeutungsobjekt spektakeliger Eckelpackete zu werden: Bilder und Situationen, Theater jenseits von Drama, Spiel mit Realität diesseits von Integration, Landschaften mit und ohne Tiefe (besser als Manet?), gelungene Partizipation und Co-Kreation statt Konsumismus, Macht des Rausches und des Rauschens, Verzerren kann entzerrend wirken. Und überhaupt: müssen wir die strukturale Psychoanalyse endlich upgraden undeinen ihrer berühmten Sager aus dem französischen Waldspaziergang ins Internet-café in Kabul transferieren, so dass ihn auch world of warcraft-user annehmen könnten? Einwand: Geht das überhaupt und wozu?



[17] Some things simply remain beautiful, without getting dull or being subjected to the rigours of the fun industry treatment, without sloping down the slippery surface of commodity aesthetics or being exploited by repugnant spectacle-mongers: pictures and situations, theatre beyond drama, play with reality beyond integration, landscapes with and without depth (better than Manet?), successful participation and cocreation instead of consumerism, the power of euphoria and of noise – distortion reveals perspectives. And anyway: is it finally time to upgrade structural psychoanalysis and transfer one of its famous prophets from his French stroll in the woods to an Internet café in Kabul so that he might even be adopted by *World of Warcraft* users? Objection: Is this even possible, and what for?



[18] 1. Versuch: Glück ist ein Bit, das auf dem Bildschirm lacht.





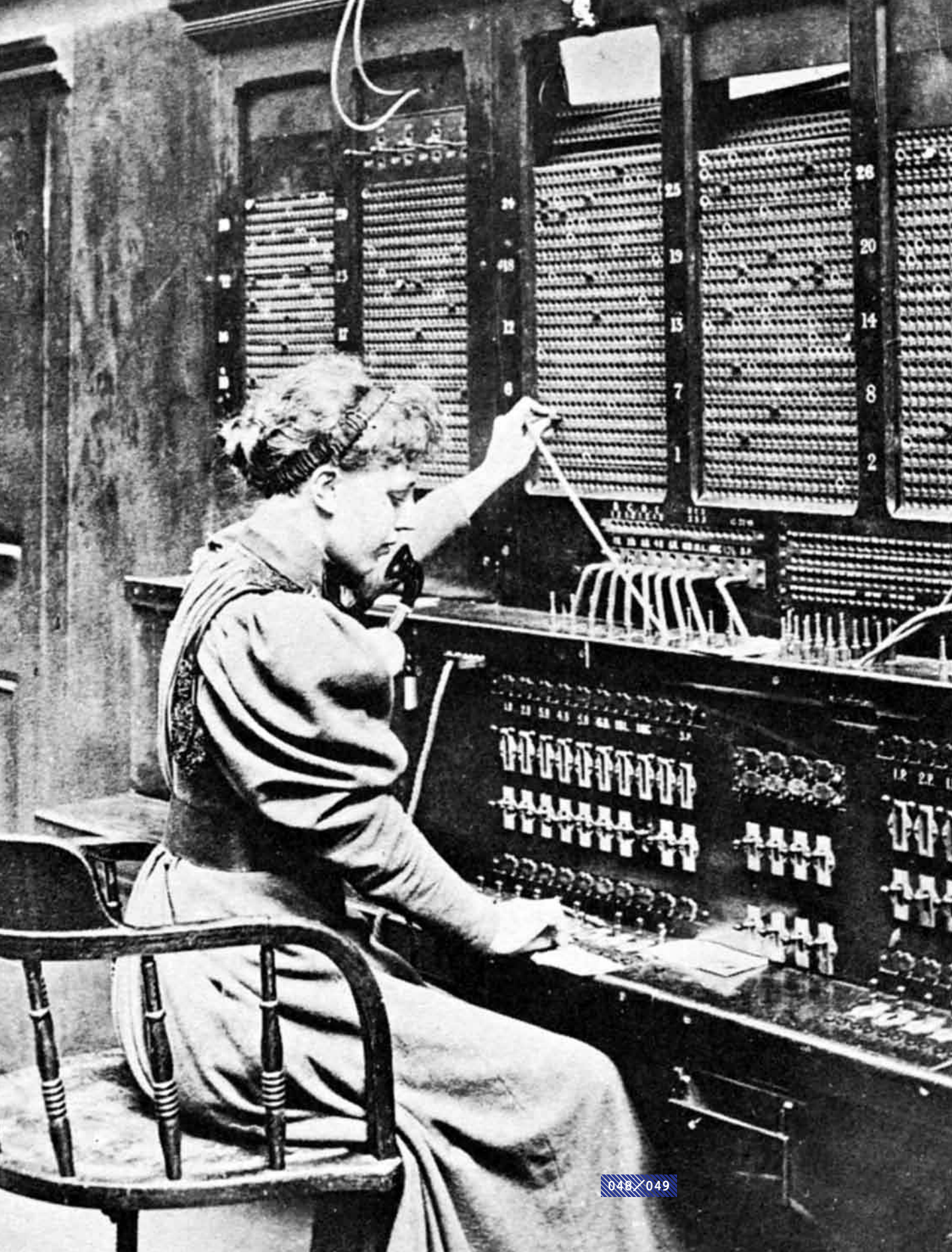
[18] First attempt: Happiness is a Bit that laughs on the screen.

Bit = Binary Digit

"We swim in a materialised flux of data – or more precisely, since this data is already interpreted and pre-digested, we drown in (dis)information. Before 'intelligence' reports can be analysed, a war has already been prosecuted on the other side of the Earth. Yet the individual's sphere of action is ever more circumscribed. The vote, and consumer politics, are strictly limited instruments."

Above and following two pages: Manu Luksch & Mukul Patel, quoted from a written exchange with Anthony Auerbach, June 2004

Right: An adult-content filtering system at the Google server farm in The Dalles, Oregon


25
19
13
7
1
26
20
14
8
2

"The most promising forum for open communication is not the town square or the café or the newspaper column – it is networked digital space. Those who inhabit this space should understand its potential, and how far this is from being achieved. Technologies of hygiene and control that restrict access, curtail expression, and intrude on privacy are being implemented by states and corporations, while public discourse lags far behind."



An encounter between two avatars in Second Life, *the multiuser online environment of Linden Research, Inc. http://secondlife.com/corporate/tos.php*

"We embrace data networks as creative medium, not in celebration of a technological idea of progress, but to demystify the technology of daily life – to render it visible, and to encourage productive use rather than consumption, so that we may responsibly exploit the substantial power that is within our grasp."



Engineers lay cables that will provide communication at 'next generation' speeds to domestic users.

Armin Medosch &
Manu Luksch
2001

Proposal for a talks programme

BROADBAND TALKS: FROM 24 FRAMES TO 24 HOURS

Broadband Talks aims to focus on new artistic possibilities arising from high bandwidth Internet connections and digital TV with interactive, Net-like features. 'Broadband' also describes the bandwidth of the talks themselves, which will bring together people from diverse practices: time-based media- and Net-artists, filmmakers and television producers, game developers, researchers and theorists.

Historical Background

Throughout the second half of the 1990s, 'broadband Internet' was promised as being 'just around the corner' by the media industry and communications technology companies. Another key term that was always closely connected to the promotion of broadband at this time was 'media convergence'. Through the merging of traditional formats such as film and television with digital technology and telecommunications, new and hitherto unimaginable forms of cultural production were to arise.

But in 2001, broadband is still 'just around the corner', and little has been seen of the promised new forms of 'interactive content'. 'Interactivity', as delivered by the industry, is merely another word for 'multiple choice'. Digital TV consumers can now watch movies 'on demand' – programmes are streamed to individual paying viewers when they request them, and not according to a fixed schedule. Another add-on to traditional TV is the 'pay' or 'order' button. While watching a commercial or 'infomercial', viewers cam simply push buttons on their enhanced remote control units to order the product. It is doubtful whether this kind of interactive TV, with its limited choice, will find enough customers willing to pay high prices for little added value; it is already clear that such formats offer next to nothing in terms of new artistic possibilities.

There have, however, been parallel developments where real artistic progress has been made: experiments with new forms of cultural production and dissemination, notably on the 'narrowband' (low bandwidth via dial-up) Internet, in CD-ROM and game development; in file sharing systems such as Napster;

Screenshots from websites:

1
Brandon ***(Shu Lea Cheang)***

2
ORANG

3
Public Netbase

and in digital video production and live video mixing (VJing). The examples below illustrate some of the ways in which the Internet has enabled true innovation with far-reaching consequences for arts practice and theoretical discourse. The primary question for *Broadband Talks* is: how will such works develop in a future environment where broadband networks are as widespread as narrowband Internet is today?

Examples Of Innovative Work

NONLINEAR NARRATION

A pioneering work of Net art, Olia Lialina's *My boyfriend came back from the war*, makes explicit the construction of film as a sequence of frames by dismantling linearity and offering all the frames at once in a web movie that can be navigated spatially. Shu Lea Cheang's *Brandon* (the first work of Net art to be acquired by the Guggenheim Museum for its permanent collection) uses the same principle in combination with:
a) collective authorship – other artists are invited to contribute their versions of the story, and
b) collective decision making – social prejudice and the ethics of legal systems are tested in an online courtroom.

COLLABORATIVE CONTENT FILTERING

One of the most widely used services of the Internet is email. Many of its derivatives, including mailing lists such as nettime, online communities such as slashdot, and discussion forums employ forms of 'collective content filtering'. While 'collective intelligence' (after the French philosopher Pierre Levy) should not be predicated of the Internet as a whole, in smaller, more focussed communities, high-speed dissemination of content (usually mainly text) combined with network effects accelerates discourse in a novel manner.

CONTEXT SYSTEMS

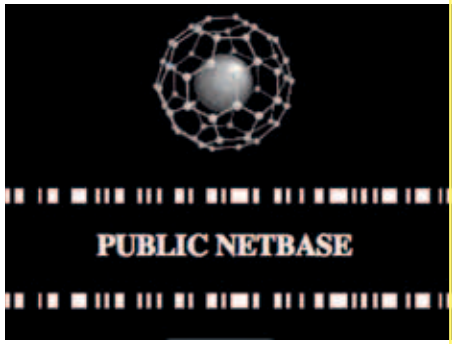
These are typically 'art servers'. Dedicated to hosting artists' projects and home pages, they have made visible the strength of new digital art scenes by offering easy access to a wide variety of work and points of possible contact and collaboration. Examples of art servers include Public Netbase (Vienna), The Thing (New York), Backspace (London), and the decentralized ORANG (Open Radio Archive Network Group in Berlin, Karlsruhe, Riga, and London), which specializes in audio and video.



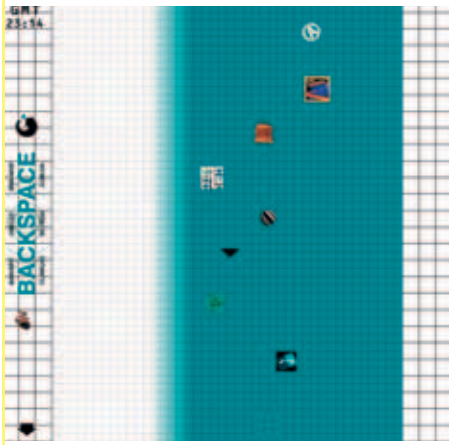
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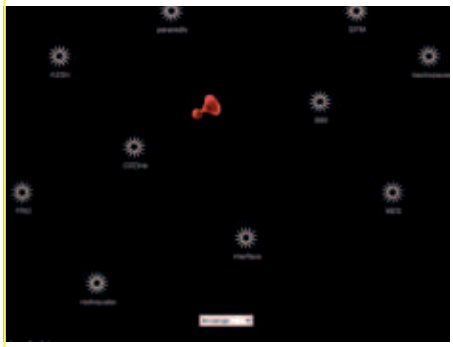
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3



1



2

PEER-TO-PEER (P2P) NETWORKS
Like context systems but without the almighty 'server', in P2P networks content is distributed across different users' hard disks and accessible to all. Napster and similar networks have opened up a new paradigm of file sharing, but are accused by the content-owning industries of facilitating piracy. Napster itself appears to be doomed, but P2P systems will certainly survive legal attacks by music labels and Hollywood.

Scenarios

Broadband might still be 'just around the corner', but that future is no fiction. We can safely assume that many individuals and institutions will have access to broadband networks within five years. How will nonlinear narration, collaborative content filtering, context systems and P2P networks translate into a broadband environment, where high-quality video can be streamed (transmitted live) as easily as emails can be sent today? At present, downloading a short music track from a P2P network over a dial-up connection is painfully slow. Broadband P2P networks will enable globally dispersed artists to connect studios and mix video streams live – something that has already been done with audio on the Xchange network. The market success of reality TV (such as Endemol's *Big Brother*) demonstrates the attraction of 'real-time real life'. But this could be explored far more radically on the Internet. Broadband could support not just nonlinear narration, as formulated above, but real-time, multichannel, geographically distributed, nonlinear narration. Collaborative content filtering could supersede, or at least augment, traditional art curatorship. And as public TV corporations across Europe begin to move archives online, creating mainstream media context systems, socio-political and cultural programmes might at last become available for everyone, everywhere.

Traditional arts institutions will need to redefine their roles within such a decentralised cultural environment. There is resistance from the conservative elite, which fears that new media will be destructive of authorship and the concept of the artistic 'original'. But, if one finds those concepts vulnerable at all, then one must recall that their deaths were announced long ago. Regardless, new media demands that new ways of assuring quality, new ways of constituting meaning, and new ways of remunerating artists will have to emerge.

Screenshots from websites:

1
Backspace

2
Xchange network

"Video posed a challenge to the sites of art production in society, to the forms and channels of delivery, and to the passivity of reception built into them. Not only a systemic but also a utopian critique was implicit in video's early use, for the effort was not to enter the system but to transform every aspect of it and – legacy of the revolutionary avant-garde project – to redefine the system out of existence by merging art with social life and making audience and producer interchangeable."

Martha Rosler 'Video: Shedding the Utopian Moment' **in** **Block 11** ***(Winter 1985–6)***

Armin Medosch
2003

Excerpt from 'My personal journey with free networks' presented at the Freifunk Summer Convention, Berlin in 2003

FOUR LAYERS OF FREEDOM

For my talk at the 2003 *Open Cultures* conference in Vienna, I developed a communication model of network freedom. It is a layered model. At the bottom is the layer of network freedom – the freedom to build networks on a physical and material level. Many things affect this freedom. One is the availability of technology, another that of free spectrum. We should lobby regulatory authorities to make more free spectrum available.

On the next level there is the freedom of access. Access is also defined multiply. Price is a factor; another is technical skills; a very important one is availability – large portions of rural populations have no chance of getting broadband Internet because of their location. The telcos run up huge profits by selling us short. For example, today only 3% of laid optical fibre is actually used. If the market were really free, then so would bandwidth be – there is no scarcity of resource. Clearly, there is something wrong with the way the market operates.

Free Networks strongly fulfil the requirements of these two basic layers (physical/material and access). But they can also play an important role at higher levels. The third layer is the freedom to communicate – to communicate what I want with whom I want, free of the restrictions of gatekeepers and the surveillance ambitions of governments. We should be able to use whatever network protocols are out there, to invent our own protocols. Essentially the expression of freedom of speech in network-based communications, this freedom is under threat from many sides – the war against terror, the war on file-sharing and the many other wars our societies are waging against themselves.

The fourth layer is the layer of media freedom – the freedom to use these networks not only for individual communication but also as collective means of exercising our right to freedom of speech. Media freedom has been delegated to television moguls and state broadcasting corporations. Large segments of society are not represented. The Net promised to improve this situation, but we have witnessed serious regression in the last few years. The promises of an open networked society are still worthwhile, but will not be delivered by Bertelsmann, Murdoch or Berlusconi.

(IL)LEGAL ART

Manu Luksch & Mukul Patel

2005

First published as a Guest Selection on the Low-Fi Net Art Locator www.low-fi.org.uk in February 2005

It is becoming increasingly evident that artists whose work interrogates the media, in particular the Internet, need to be extremely vigilant of the legislative and judicial landscape in which they operate.

As growing numbers of users of the Internet increasingly exploit its salient feature (the combination of digital media and data transport networks), so the legal questions that have come to the fore in public consciousness and in the courtroom are those surrounding the issue of Intellectual Property Rights (IPR). Much new media legislation attempts to restrict file sharing and enforce copyright; to this, artists have responded directly, through fora such as *Kingdom of Piracy*[1] and *Illegal Art*[2]. Initiatives such as the Creative Commons[3] and the Electronic Frontier Foundation[4] offer alternative visions of the rights conferred by ownership (and indeed, alternative conceptions of 'ownership'). It is hoped that such engagement will help to strike a better balance betwen the nurturing of cultural practices such as sampling, quotation, and exchange, and the protection of rights of commercial exploitation.

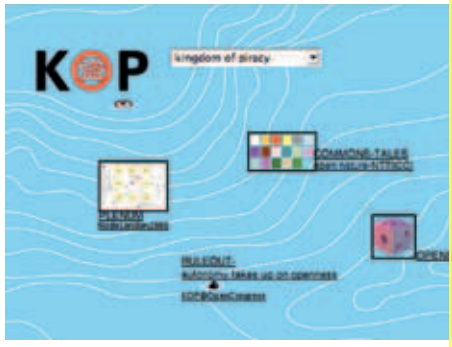
The cases selected here engage in a different manner with the law: they are examples of critical artworks that have triggered legal repercussions for reasons other than IPR infringement. Let us (generously) regard legislation as a benign attempt to codify norms. Let us also characterise critical art as a discursive form that stops short of outright political dissent. Much critical art interrogates (as a minimum) particular social or legal codes. Conflict is inevitable. How, practically, is the critical artist to engage in dialogue with an interlocutor who possesses overwhelming economic power or a monopoly on legitimate coercive force? This is as pressing a question for independent and state-funded arts-support agencies as it is for artists. And it is a matter of significant import for those state-funded arts agencies that may be restricted, by their constitution or by prudence, in their support of work that might attract legal redress. Our experience suggests that arts agencies might increasingly have to consider the provision of legal support to artists, in addition to the other means of support that they currently offer.

[1] http://residence.aec.at/kop

[2] www.illegal-art.org

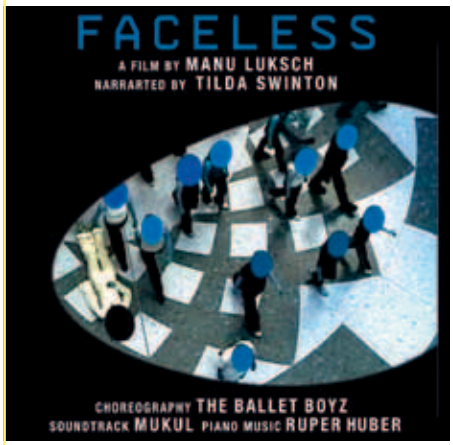
[3] www.creativecommons.org

[4] www.eff.org



Kingdom of Piracy

Screenshot of website



1



2

As civil liberties are curtailed and private space becomes ever more circumscribed, so more artists are deliberately employing judicial procedures in order to comment on the law. The realisation of such works often calls for substantial legal resources. At ambientTV.NET, we began to experiment with such an approach in 2002 during the production of *Faceless*, a feature-length movie that exploits, as its main production principle, the legal status of surveillance camera images under the terms of the UK Data Protection Act.

The example cases have been chosen to illustrate instances where a corporation or state has acted in what we regard as an unreasonable manner against an artist or group of artists; such action not only affects the particular persons involved, but also threatens the creative freedom of all those who engage in the public discourse that is the foundation of a vital and balanced society.

etoy.com vs eToys, Inc. (domain name vs trademark)

In January 2000, the artist group operating under the name etoy.com[5] (winners of the Golden Nica award at Ars Electronica for *Digital Hijack*, 1996) emerged victorious from a legal dispute with California-based online toy retailer eToys, Inc. To prevent potential customers from mistakenly arriving at the artists' website, eToys, Inc. attempted to prevent etoy.com from using that domain name. When eToys' attempt to claim or buy the domain name in question failed, eToys filed a trademark infringement lawsuit and achieved a temporary injunction to block the domain name. etoy.com countersued, and when the Internet community expressed overwhelming support for the artists, eToys aimed for settlement.

[5] www.etoy.com

For many, this conflict symbolized the pitting of strength between a Goliath – the force of money in a hyped dot.com era, and a David – the force of the utopian imagination (or what was left of it) that heralded our move into cyberspace.



3

Critical Art Ensemble/Steve Kurtz vs the FBI (biotech art vs The USA PATRIOT Act)

The mere possession of a laboratory, innocuous bacterial cultures that are certified safe for school use, and associated literature led to the arrest (under the USA PATRIOT Act

2001) of key Critical Art Ensemble[6] member and SUNY Buffalo art professor Dr. Steven Kurtz by federal agents on the suspicion that he was a 'bioterrorist'. Artists, scientists, institutions and the wider public immediately gathered forces to condemn the arrest and also what appears to be a policy of intimidation and infringement of freedom of research and artistic expression.

The Critical Art Ensemble (CAE), based in the USA, has become internationally acclaimed over the last two decades for its interdisciplinary work across art and science. CAE's public stagings of scientific procedures, especially in the field of biotechnology, has helped to demystify issues such as genetic modification (GM) and biowarfare and opened up the public debate. In 2004, the CAE was investigating the history of US involvement in germ warfare; it was for this work that Kurtz had established his laboratory at home.

Unable to make the charge of bioterrorism stick, officials downgraded the charge to one of mail and wire fraud (a catch-all), which also affects Dr. Robert Ferrell, Professor of Genetics at the University of Pittsburgh, who is alleged to have ordered and shipped the sample bacteria to Kurtz. A threat of a 20-year jail term still hangs over Kurtz and Ferrell[7].

Knowbotic Research vs LogicWorks (port scanning vs Acceptable Use Policy

In 2001, Logicworks, the internet service provider of the New Museum in New York, pulled the plug on the museum's connectivity. The museum was then hosting the installation *Minds of Concern* by artist duo Knowbotic Research[8].

The installation employed port scanning to lay open and question the vulnerability of non-profit sites, which, in the artists' view, constitute the public domain online. *Minds of Concern* uses the software Public Domain Scanner, which explains how to prevent crackers from exploiting security holes found in the public domain and displays the risk level of each problem found – a commonly used process in corporate networks.

As a result of being thrown offline by the pre-emptive action of Logicworks under an Acceptable Use Policy, the project appears to have realised its aim of visualising the vulnerability of non-profit organisations in an entirely unanticipated way.

[6] www.critical-art.net

[7] Ailed by poor health, Ferrell pleaded guilty to a misdemeanour. Kurtz was finally vindicated in June 2008, Asked for a statement, he responded: 'I don't have a statement, but I do have questions. As an innocent man, where do I go to get back the four years the Department of Justice stole from me? As a taxpayer, where do I go to get back the millions of dollars the FBI and Justice Department wasted persecuting me? And as a citizen, what must I do to have a Justice Department free of partisan corruption so profound it has turned on those it is sworn to protect?' Details of the case are at www.caedefensefund.org



4

[8] www.krcf.org/krcfhome/unitedhome/ny



1

Although the incident did not lead to court action, it remains pertinent. Curator Steve Dietz: 'The fact that *Minds of Concern* is potentially undermined by the legal system in the form of a standard or "shrinkwrap" license the New Museum has with its ISP is not insignificant. It is precisely a legal bug and the strategy by which so much of the public domain in the US, at least, escapes Constitutional and other legal protections by entering into contractual agreements that void and/or supersede these supposed rights.'

Indymedia vs the FBI (freedom of speech vs Mutual Legal Assistance Treaty)

In early November 2004, following a subpoena by the FBI, the London-based branch of US ISP Rackspace handed over server hardware owned by Indymedia UK[9]. The hardware hosted sites by 20 international independent media centres, which went offline as a consequence. Indymedia's queries regarding the reasons behind and legitimacy of the actions of the FBI, which has no jurisdiction in the UK, were stonewalled. The action was deemed an ongoing criminal terrorism investigation, and hence classified.

Indymedia assumes that the action might be related to photos of Swiss undercover agents published on the French Indymedia website, but is also concerned about email correspondence between journalists and lawyers concerning violent behaviour of Italian police during the G8 meeting in Genoa.

Indymedia is an independent newsgathering collective that relies strongly on open publishing systems online to provide first-hand information about political events. The seizure of Indymedia server hardware and data is a relevant incident to the self-understanding of all 'art servers'[10] as non-for-profit, independent nodes that facilitate artists and activists.

Ubermorgen vs the FBI (artistic critique of election process vs illegal vote trading)

During the run-up to US general elections in 2000, the Swiss-Austrian artists ubermorgen.com[11] launched an online project, *[V]ote-Auction*, which commented on the practice of democracy in the corporate age by suggesting and enabling the trading of votes to 'bring capitalism and democracy

[9] www.indymedia.org

[10] http://asu.sil.at

[11] www.ubermorgen.com

1
Indymedia logo

2
Logo of Ubermorgen's
[V]ote-Auction *project*

Previous page:
1
Faceless *promotional image*

2
etoy.com
Screenshot from website

3
Critical Art Ensemble
Screenshot from website

4
Knowbotic Research
Screenshot from website

closer together'. The reaction: 'Several US States (Missouri, Wisconsin, Chicago, Arizona, Nevada, California, Massachusetts, New York) issued temporary restraining orders or injunctions for alleged illegal vote trading. This led to the shutdown of two domains (voteauction.com and vote-auction.com). Federal Attorney Janet Reno, the FBI and the NSA were investigating the case to ensure the integrity of the voting process on November 7th, 2000.'[12]

[12] From http://vote-auction.net

Stubnitz Kunst-Raum-Schiff vs Deutsche Bank (arts funding/cultural capital vs investment for profit)

In November 2004, after almost a decade of drawn-out legal processes, one of the cases surrounding the initiation of the legendary *Stubnitz Art-Space-Ship*[13] reached a crucial phase. A court decided that one of the founder artists owed a substantial sum of money to the Deutsche Bank/Government of Mecklenburg-Pommerania (MV). The funds in question were released by the government and spent on the launch art-tour of MS *Stubnitz*. Two further cases are pending. What had happened?

[13] www.stubnitz.com

In the early 1990s, a group of artists planned and realized the conversion of a 240-foot deep sea fishing vessel, MS *Stubnitz*, into a mobile media lab and event space. Networking, interdisciplinary work between art, science and technology, and the facilitation of cultural exchange were at the conceptual heart of the project. *Stubnitz Art-Space-Ship* was designed to connect cities and people in East and West as it journeyed. Equipped with a satellite dish for Internet connection, fax and phone, and with modern studio facilities and workshops for audio, video, and design, *Stubnitz* tapped into the emerging networks of electronic culture and offered a unique platform for cultural exchange soon after the fall of the Iron Curtain.

MS *Stubnitz* is based in Rostock (in former East Germany), the commercial capital of an area of high unemployment, disenchantment, severe social problems and a strong neo-right-wing movement. The vessel acts as an important cultural venue in an area with few other places for young people.

After many years of preparation work, the project leadership found itself under severe pressure to raise more funds to prevent the project from collapsing just before the inaugural



2



journey to St. Petersburg and other ports (Baltic Tour 1994). The local government, a funder of the project, took steps to arrange a bank loan backed by a government surety. At the very last moment the four project initiators were asked to give a personal surety (DM 100,000 or approximately EUR 50,000 each) to back that of the MV government. What should have been a legal formality was to turn into a financial boomerang. After the Baltic Tour, when sponsorship deals failed to materialise, and the legal organisation behind *Stubnitz* filed for bankruptcy, the MV government paid back the loan to Deutsche Bank. Deutsche Bank then began to pursue the four initiators for their personal sureties of DM 100,000, seemingly acting on behalf of the MV government.

Today, MS *Stubnitz* still operates as cultural platform based in Rostock.[14] Whenever she sails to neighbouring cities, the Prime Minister of Mecklenburg-Pommerania acts as if the ship were under his patronage. But this very same government continues to pursue the initiating artists for their personal sureties.

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[14] The *Stubnitz* is currently docked in Amsterdam (2008) – *Ed.*

SPECIES OF SPACES

Mukul Patel

2006

Intensive, wide-ranging, interdisciplinary seminar (24 h) that elicits questions about conceptions of space by tracing a route through recent developments in technology, politics, and art; PLUS 8 h lab introducing some works of sound art and dance that deal with space in an exemplary manner. Assessment: by participation and assignment.

Notes for a seminar at the School of Architecture, CEPT, Ahmedabad, India

The title is from Georges Perec.

Invitations, propositions, provocations:
– With the rise of digital networks emerge new kinds of spaces and new ways of regulating space
– Virtual/cyberspace and real space are radically different/fundamentally the same
– The information revolution has been of greatest service to the consumer/citizen/state/corporation
– Once upon a time, there was a desire to network electronically, driven by a libertarian/humanist/techno-utopian/social democratic commitment; now it is a commercial compulsion
– Digital networks offer unprecedented opportunities for hierarchical control/grass-roots self-organisation
– Once only ceilings were glass, now walls are too
– Communication networks have shrunk the globe to the size of a village; the network of dependencies once confined to a village have expanded to span the globe
– More information is better than less; less is more.
– Free flows – of what? borders – for whom?

0. space
dimensionality: Abbot's *Flatland*, fractal space

SPACE / SPACE (after Perec)
outer space/inner space (psychic/mental/spiritual/oceanic)
out of space/out of disk space
public space private space/personal space
contested/collective/individual space
luggage space
discrete space/continuous space
digital space/networked space/media space
acoustic space
control space
space for criticism/space for dissent?

Assignment:

Choose a space and map the variation of one or more attributes (of the space, or of its contents or inhabitants).

You may interpret 'space' in any way you choose. The space may be imaginary. It may be immaterial. The attributes may likewise be imaginary or immaterial.

Your work may be presented in any form, in any medium (SMS, poetry, charcoal, clay, dance, theatre, telephone bill, manifesto...), but you may not attempt to communicate it telepathically (despite illustrious precursors). In any case you should aim to illuminate the concept of, or a particular conception of, space.

Accuracy, exhaustiveness, legibility, and other properties of traditional maps may (or may not) be desirable in your work. Preliminary studies & experiments are acceptable. Process-based and conceptual (in LeWitt's sense of not requiring execution) works are acceptable. Collaborations are acceptable. Sources must be cited. Works that displays clarity, elegance, insight, imagination, adventurousness, or wit are strongly preferred.

Works not in English needs an English abstract.

1.1 salient differences of digital
- encoded (encrypted) signal
- distinguish signal from noise
- possibility of perfect copies
- no deterioration of data over time
- cheap and fast
- can be radically transformed easily
- networkable

1.2 virtual/real space
MMOGs (massively multiplayer online games)
- *America's Army* recruiting game/'Enduring Freedom' cockpit cams
- intervention in *America's Army* (deLappe: dead-in-iraq)
- 'Chinese gamer sentenced for stabbing man who borrowed virtual sword and sold it'.
- property development in virtual worlds; gold farming (gamers employed by players with more money than time)
- market instruments: derivatives, options on options, weather futures more real than virtual swords and villas?

1.3 first & second digital divides
first digital divide: of access
- failure of Simputer; Negroponte's $100 One Laptop Per Child
- mesh networking, Motoman in Laotian villages

second digital divide: producers vs. consumers
- Internet replaces TV -> a new generation of TV watchers
- hackers and crackers (Chaos Computer Club)

1.4 DRM and IP
promise of digital to consumer: better, faster, cheaper; reality: encoding enables more restrictions than analog
- DRM: digital rights/restrictions management over and above technical measures and copyright (no time limit so what when copyright expires?)
- DMCA (US Digital Millennium Copyright Act) - in Iraq!
- deCSS (distributed as haiku, prime number etc.)
- DVD region coding (nothing to do with piracy)
- EURION (anti-forgery device for currency, Photoshop identifies images as currency)
- big brother (some laser printers serialise every page)
- Perry Hoberman - MS Word dialog boxes (should be virus)

remix culture
- British Phonographic Industry 1980s: 'home taping is killing music' (home taping is skill in music!)
- 'copywritten so don't copy me' (Missy Elliot, 2000s), favourite of 'mash-up' artists

– DJ culture (1970s Jamaica: King Tubby, NYC: Kool Herc); turntablism: Kid Koala and Christian Marclay (and Moholy-Nagy)
IP (intellectual property)
– John Perry Barlow, 'Selling wine without bottles on the global net'; open content licensing: Lawrence Liang
– FLOSS (Free/Libre & Open Source)
– vulnerability of monocultures (analogy from nature)
– WTO TRIPS and software patents
– patentability of genes/EST expressed sequence tags
– biospace, biopiracy: neem, basmati; terminator seeds; Monsanto tactics: spread & sue
– corporate theft from the public domain
– July 2006 US Attorney General: attempted sale Coke trade secrets to Pepsi 'like sale of intelligence to enemy govt'.

2.1 21st century cities
disappearance of public space (like that of common land)
– LA: freeway billboards only space for public service ads
– Ina Zwerger attempting interviews in Canary Wharf
– San Francisco's POPOS (privately owned public open spaces)
– Frank Lloyd Wright house (in Perec) & gated communities
commercialisation/licensing of space
– shopping mall (sounds/smells, eye tracking)
– Koolhaas: shopping as last remaining form of public activity
– Perec's 'Life in an Airport' & Mehran Karimi Nasseri (at Paris CDG 8/8/88 till 8/06, when hospitalized for unspecified ailment
– 'legalised busking' on the Tube (sponsored spots)
– disappearance of street vendors (Beijing, Ahmedabad)
– responses: *PARK(ing)* project; flashmobs; Circle Line parties

2.2. control-space
new technologies of political control
USA PATRIOT act, other anti-terrorism laws
– fastest growing industries: security and surveillance
– Echelon: public communications spying network
– TIPS US Terrorism Information & Prevention System: spying on neighbours, the Citizen Corps (in UK: Community Wardens)
– UK: London's ring of steel, congestion charge, TfL: 'guilty until proven innocent', 'safe beneath the watchful eyes'
– ASBOs, social hygiene
– Calvino ('A King Listens'), Bentham's panopticon
– sonic weapons (Vivaldi on UK rail platforms to repel youth/ LRAD for riot control/repelling pirates)
– tasers & other 'non-lethal weapons'
– video surveillance at demos subverted with remote controls



Stencil art by Banksy, Brick Lane, London c. 2003
Photo: Mukul Patel

2.3. pervasive location-based information: wireless/GSM, GPS/GLONASS/Galileo, RFID, LF tagging
– GPS is military (selective availability/jamming)
most pervasive location sensitive sensor is mobile phone: 3G phones have (half a) GPS chip
– mobilephonebug.co.uk; vehicle tracker systems; mapamobile: 'always know where your loved ones are'
– itemised lists of billing, calls (Ghodra riot cases)
– industry/government – can remotely switch on phones
RFID tagging
– 'open prisons'; Zara; Doncaster school; Barcelona club implants RFID for VIPs; medical tagging
– LF tagging of billboards (Arbitron PPM Houston?)
mapping
– psychogeography, Dutch anti-CCTV map, ambient.locative
– Google maps; gpsdrawing.com; *Border Xing*; Peter Fend

2.4. borderlands and war
– first indication of boundary: who's billing your mobile
– Berlin: Haecke & Liebeskind's works using earth
– walls (US, India, Palestine); Banksy in Palestine
– extraordinary rendition; Guantanamo
– Ariel Sharon 1973: networks/nodes not linear fortifications
– Hamas burning architectural models
– IDF moving through walls
– Fukuyama's premature 'end of history'
– energy, water, weather security (peace is suppressed war)
– fear and consumption (9/11); protect future consumers

3.1 radical aspects of 20th century art
development of photography precipitates crisis; end of the idea of the 'creative genius'
– Duchamp's objet trouvé interrogates position of artists vis-a-vis gallery; *LHOOQ* & *Fountain*; Moholy-Nagy uses communication/industrial technologies (*Telephone Painting* 1922, *Light-Space Modulator*)
late 50s-early 70s: aesthetic & political upheavals; the dematerialisation of art object; art moves out of gallery
– Rauschenberg's *Erased De Kooning*; Baldessari's commissioned paintings; Manzoni's *Base of the World*; Chris Burden; Yves Klein declares his art invisible; 1960: Brouwn declares all shoe shops in Amsterdam constitute an exhibition; Christo's 1962 'Iron Curtain' barricade of Paris street is machine that makes art (ensuing traffic jam); 1967: Long's *A line made by walking*; 1972: Fred Forrest buys space in *Le Monde*, invites readers to fill

– conceptual art: Le Witt, execution a perfunctionary affair
– Bochner, Asher (how neutral is the gallery?)
– Haecke's Guggenheim rejection (how neutral is the gallery?)
– real life/space is medium: Haecke, Matta-Clark, Earthworks

3.2 1990s/2000s tactical use of media carries lineage of 60s/70s systems art
– 'media art' encompasses diverse practises: analog video art to procedural software
– some media art interrogates/engages with telecommunications media (not just uses it as a medium)
– telecommunications art is culmination of process of dematerialization of the art object pursued by conceptual/systems artists
– *Makrolab* (Marko Peljhan's science-art hybrid project)
new media art->tactical media->subversion->culturejamming

3.3 art/activism/culture jamming
– mediaspace and conglomeration
– UK: Reclaiming of mediaspace associated with DIY movement, reclaiming of streets/public spaces (road protests)
– *theyrule.org*
– independent media infrastructure
– billboard hacking, the bubble project (NYC); Barbie Liberation Organisation
– shopdropping/moneydropping (Hoffmann revisited); space hijackers
– Yesmen (Bhopal)
– *Empire North* (Jakob Boeskov)
– ubermorgen's *[V]ote Auction*
– Critical Art Ensemble

4.1 three exemplary approaches to body/space
– Shobana Jeyasingh: external form imposed on body
– William Forsythe, sculpting/avoiding geometrical figures
– Russell Maliphant: extrapolating from body's internal structure/movement (base in yoga/martial arts)

4.2 sound in space (lab)
– performances of Steve Reich: *Pendulum Music*, Alvin Lucier: *I am Sitting in a Room*
– introducing multichannel sound installation with Max/MSP



Still from video interview with Israel Defense Forces Commander, as presented by Eyal Weizman at the Pervasive and Locative Arts Network (PLAN), ICA, London, February 2005

2/A FILM HAS AN END
WHILE REALITY CONTINUES

2／A FILM HAS AN END WHILE REALITY CONTINUES

“In the beginning, we were very happy that they built a road. After only a short while, the Forest Department sent people to mark the large trees along the road. They probably logged many hundreds of thousands of those large trees. One tree could be used to build a house, but all the big trees are gone now.

“After that came electricity… and also television. Everybody thinks that TV is a good thing, and they concentrate only on Chinese movies. People don’t discuss their own culture and way-of-life any more. They don’t go to the dancing grounds in the villages any more.

“Records should be made of our way-of-life before all those who still remember, die. But one man cannot do it all by himself.”

Abaw Buseu, from the film Virtual Borders *(Manu Luksch, 1999)*



From the series Signature or right thumbprint
Photographic silkscreen print, 102 x 112 cm
(Manu Luksch, 1993)

Manu Luksch
2000

First published in the *net.congestion reader* (Amsterdam: De Balie, 2000). All images by Manu Luksch

VIRTUAL BORDERS OR DIGITAL DIVIDE?

Two per cent of the world's population have Internet access, half of them live in the US. 0.5% of the population in Southeast Asia have Internet access[1]. In industrialized countries, the term 'convergence' is mostly associated with a promised fusion of TV and Internet: TV over broadband, or Internet via TV set-top boxes, with a single cable or satellite connection carrying the signal. Massive advertisement has confused consumers with alternative hardware solutions before they can even begin to anticipate the content that might become available.

The excitement about convergence stems partly from it being an imagined common future. However, the allegedly global Internet simply *isn't*, yet. In developing countries, the most common medium is radio, especially in rural communities poor in infrastructure. Here, too, convergence is coming – but a more radical and rooted convergence, bringing together radio and the Internet as a tool of empowerment[2].

Virtual Borders is a hybrid media project[3] for, with, and about the Hani-Akha, a mountain people of the Mekong Quadrangle. It intertwines local AM radio, online transmission of audio files, a documentary film and a website[4] to reach and involve a diverse and dispersed audience. The underlying story is that of the journey of a village headman, Abaw Buseu, from Thailand to a cultural gathering of the Akha people in China. He is accompanied by an Akha radio presenter and the film team. Using the Internet, they transmit discussions from the gathering back to a radio station in Thailand for broadcast to remote mountain villages.

Three million Akha and Hani people live across the borderlands of five nations: China, Lao PDR, Vietnam, Thailand, and Burma (Myanmar). They identify as one people (Hani-Akha) through a common 'tribal' history, rather than the modern world history that created the nation states they live in. Theirs is an oral culture; traditional knowledge is passed on through the generations by recitation from memory. More recently, this transmission has been supported by programmes broadcast by the Mountain Peoples' Radio Station in Chiang Mai. Battery-powered transistor receivers provide the only access to media channels for many of the Akha villages.

[1] *UN Human Development Report 1999* http://hdr.undp.org/reports/global/1999/en

[2] www.comunica.org lists several radio-Internet projects in developing countries.

[3] As originally envisaged the film of *Virtual Borders* would, after a traditional linear introduction, turn into a random access, database-driven movie that could be navigated according to the viewers' interests.

[4] www.hani-akha.net



Distribution of Hani-Akha (in orange) across the Mekong Quadrangle

Leftovers of the High-Tech Age

[T]he first electronic war in history was devised at Harvard and MIT. [...] In 1967, the Nakhon Phanom electronic surveillance centre in Thailand was picking up, interpreting and displaying on screen data sent from ground-interceptors and relayed by Lockheed Bat-Cat aeroplanes. In these offices, the new nodal point of the war, an IBM 360.35 computer automatically sorted the data, producing a 'snapshot' which showed the time and place when the interceptors had been activated. On the basis of this information, analysts drew up a schedule of enemy movement and passed on to fighter-bomber crews the 'Skyspot' combat data that enabled them to go into action with the greatest dispatch and precision.[5]

Shooting a film in mountain jungle villages where infrastructure such as electricity, water systems and roads is mostly missing, one is tempted to celebrate, romantically, 'tribal' life in harmony with nature. However, not all is what it seems. During the 1960s, at the height of Cold War, the foothills of the Himalayas in the Mekong Quadrangle[6] served as an operational area for state-of-the-art data-collection and -transfer technologies, in failed efforts to track down and exterminate the 'Communist guerrilla'. One relic of CIA activities is the radio station in Chiang Mai, in northern Thailand. The *Virtual Borders* team met with the director of what is now the Mountain Peoples' Radio Station, Vichien Kiratikanchai, and presenters of Akha language radio programs, Asseu Somsri Dzuebaw Jupoh and Apho Ratanawichaikul:

People who work here told me about the history of this radio station. They say that in the beginning, many years ago, a lot tribal people lived in the mountains who didn't know who they were: Thai or Burmese or Laotian or whatever. The Thai government thought it is better to get some news or information from the government to the tribal people in order to establish contact with them. That's why they started the mountain people [radio] programme.[7]

... Or, as another friend put it, the state found radio a useful means to establish itself as protector of the mountain villages, and to warn the villagers not to host rebels. Today, ten ethnic minority groups including the Akha transmit daily programmes in their native languages. These reach deep into northern Laos and the Shan State in Burma, where radio is the predominant medium of mass communication.



Akha village swing

[5] Paul Virilio *War and Cinema. The Logistics of Perception*, pp 82–83 (London: Verso, 1984)

[6] Also known as the 'Golden Triangle', though this does not always include the Chinese province of Yunnan.

[7] Video interview with Apho Ratanawichaikul, December 1999



Akha family from Lao PDR

The Akha People Network



The Virtual Borders *Team*

I had been in contact with Akha individuals and NGOs since 1993, collaborating with them on video workshops and websites. The idea for *Virtual Borders* and its choice of media evolved out of this dialogue, and was catalysed by an invitation to attend the Third International Conference of Hani-Akha Culture in 2000. The Conference was hosted by the People's Government of the Xishuangbanna Dai Prefecture in Yunnan, China. The official focus lay in 'cultural and social issues', and representatives of the Akha leadership used the occasion to compare conditions within different national contexts.

Policies of the five nation states that the Akha inhabit impact differently on them in terms of citizenship, formal education, infrastructure, land rights, etc. The different predominant lowland cultures also vary in their effects. For thousands of years, the network of Akha villages has survived knowing no geographical centre or territorial borders, invulnerable as long as the oral transmission of shared experience, wisdom and history was unchallenged. However, in the face of new methods of communication, such as electronic media and various national scripts, this network has become fragile. How can such innovations be turned to the advantage of the Akha?



Abaw Buseu

Exploring Media Hybridity

Documentary filmmakers typically attempt to minimise their own presence. *Virtual Borders* is driven by a different vision: not only to relate a story, but also to use the dynamics of various media to create a situation that will continue to empower those featured in the film. In this case, the project introduces the Internet as an effective, portable, and affordable solution for making temporary audio links between people separated by political borders and geographical distance. For an oral culture, the multimedia capabilities are especially important.



Asseu Jupoh interviews Cha Nyawrbyevq Ke, Vice Governor of Xishuangbanna Dai Prefecture

The structure of the project recognises an emerging 'media loop': film, radio, and the Internet. Presenter Asseu Jupoh transmitted conference discussions by Internet from China to the radio station in Chiang Mai, which broadcast them to Akha villagers. In the radio station, Apho Ratanawichaikul fielded questions from callers and communicated with the conference participants using video-mail facilities. All of these links are documented in the film.

A Film Always Has an End...

A film always has an end while reality continues. As part of the wider *Virtual Borders* project, the team taught some Akha people who were already familiar with computing the basics of HTML and web publishing. This led to the creation of the first Akha-made website. The site is in both Akha and English and serves both as an internal communications tool for the community, and as a means of self-representation to others. The end of the film of *Virtual Borders* leads to the community website, which serves as an 'online interface' to the people who appear in the film: the audience is given a tool to influence how the 'story' continues.

The *Virtual Borders* DVD (with subtitles in English, Thai, French, Italian, Slovak, and Japanese, and voice-overs in Akha and Hindi) is available at www.ambientTV.NET

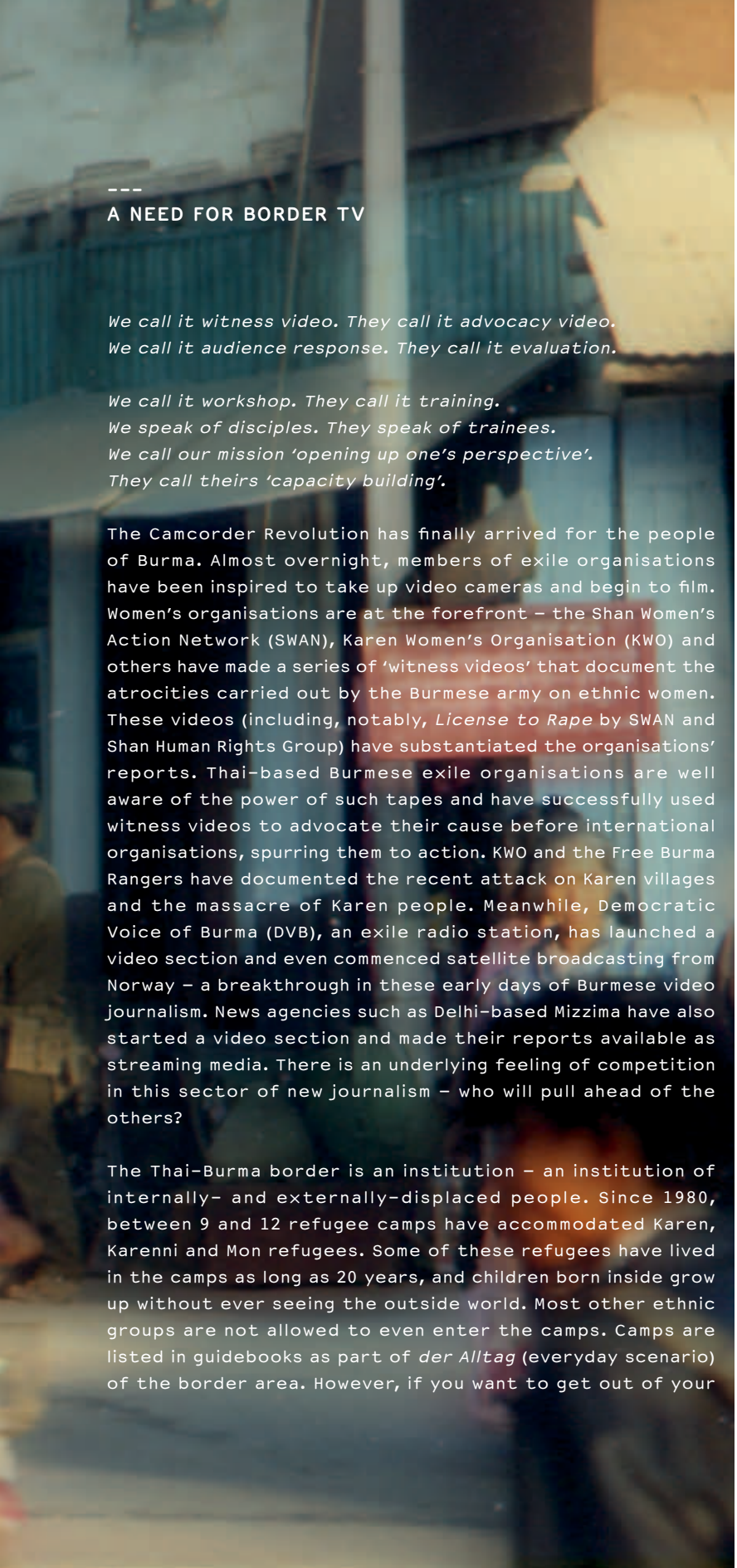
Further information on *Virtual Borders*: www.ambientTV.NET/akha

Converging Technology for Converging People

The convergence of Internet-radio-film content in *Virtual Borders* is at root a convergence of the people involved in the different media. People create borders and divisions, and it is people who bridge them (sometimes with the help of technology).







A NEED FOR BORDER TV

Keiko Sei
2006

We call it witness video. They call it advocacy video.
We call it audience response. They call it evaluation.

We call it workshop. They call it training.
We speak of disciples. They speak of trainees.
We call our mission 'opening up one's perspective'.
They call theirs 'capacity building'.

The Camcorder Revolution has finally arrived for the people of Burma. Almost overnight, members of exile organisations have been inspired to take up video cameras and begin to film. Women's organisations are at the forefront – the Shan Women's Action Network (SWAN), Karen Women's Organisation (KWO) and others have made a series of 'witness videos' that document the atrocities carried out by the Burmese army on ethnic women. These videos (including, notably, *License to Rape* by SWAN and Shan Human Rights Group) have substantiated the organisations' reports. Thai-based Burmese exile organisations are well aware of the power of such tapes and have successfully used witness videos to advocate their cause before international organisations, spurring them to action. KWO and the Free Burma Rangers have documented the recent attack on Karen villages and the massacre of Karen people. Meanwhile, Democratic Voice of Burma (DVB), an exile radio station, has launched a video section and even commenced satellite broadcasting from Norway – a breakthrough in these early days of Burmese video journalism. News agencies such as Delhi-based Mizzima have also started a video section and made their reports available as streaming media. There is an underlying feeling of competition in this sector of new journalism – who will pull ahead of the others?

The Thai-Burma border is an institution – an institution of internally- and externally-displaced people. Since 1980, between 9 and 12 refugee camps have accommodated Karen, Karenni and Mon refugees. Some of these refugees have lived in the camps as long as 20 years, and children born inside grow up without ever seeing the outside world. Most other ethnic groups are not allowed to even enter the camps. Camps are listed in guidebooks as part of *der Alltag* (everyday scenario) of the border area. However, if you want to get out of your

Alltag, 'you can volunteer with one of those refugee camps', as *The Lonely Planet Guide* advises long-stay backpackers. Outside the camps exist a variety of ethnic groups, some working and living illegally, some surviving from photo sessions with tourists in tourist villages, some working as democracy activists in one of the hundreds of activist organisations. These ways of life are long-established. Because of a lack of state provision, people have invented their own means to get by – they have their own government, a network of medical care, religious services, a bank-like money service, a job agency, media and communication services, and orphanages and schools. They have established methods to deal with the local police and the Royal Thai Army (part of Thailand's hidden industry). Some of these organisations send their personnel back and forth between offices in town and deep in jungle, sometimes to fight with guns, sometimes to report, and sometimes to bring humanitarian aid into the most heavily land-mined area on Earth. Transportation systems have had to be established for such operations, since there is little infrastructure otherwise.

Overall, life on the border is, if not virtual, then at least very precarious. The plight of the refugees and the peculiar conditions of life in the region have captured the imagination of the international community, and a steady stream of aid has kept coming in. Over the years, numerous NGOs have established their offices and missions, with their own methods of dealing with the Thai authorities, in the border area. As a result, the town of Mae Sot, the centre of the border region, is a curious mixture of refugees from Burma, members of exile organisations with diverse objectives and ethnic backgrounds, foreign NGO personnel, missionaries, and military intelligence agents from both Thailand and Burma living side by side with local Thai residents. It is a self-enclosed world, to enter and leave which people must pass through several police and army roadblocks. One humanitarian aid officer from Europe described the region as 'a place where we can find a robust civil society' – a civil society that has taken on an abstract and elastic shape, that floats around in a politics of whim.

Until recently, radio and printed media – BBC, VOA, Radio Free Asia (RFA), DVB, *New Era Journal*, *Mojo*, *Burma Post*, etc. – have served the community for information exchange. Most exiles rely on these traditional media for their information, and statistics show that 30% of Burmese living inside Burma secretly listen to the illegal exile radio stations. People in some areas can tune to shorter-range community radio that

provides listeners with a more personal service: some Karen people operate a radio channel for people in the camps, and an NGO called MAP (Migrant Assistance Program) offers a radio studio for ethnic language programs to be aired on Thai radio. The Mountain Peoples' Radio Station in Chiang Mai (featured in ambientTV.NET's *Virtual Borders* project) serves several minority language groups. The Internet is catching on too, but is used more to gather information and not yet as a means to muster an action program. Blogs and chat rooms are springing up, even inside Burma. These, however, are more seen as an activity of the wealthy of Yangon who want to gossip about love and movie stars – Internet cafés are still prohibitively expensive for ordinary people, and are monitored. We must yet wait to see net users develop a creative, or even political agenda.

In this media climate, video arrived last. The reasons for this late arrival, in my opinion, are twofold – the 'hidden camera effect' and 'pirated VCD psychology'.
– the 'hidden camera effect': people from Burma believed for a long time that video was solely an activity of foreign professionals from the BBC, Images Asia or Asia Works who smuggled cameras in and out of the country. This belief created a strange audience psyche – the more unstable the image, the more authentic the video, because the 'foreign professionals' had to film with hidden cameras!
– 'pirated VCD psychology': pirated commercial VCDs are readily available on the street in bigger towns; even during crackdowns on piracy by the authorities, people know how to get them. The audience assumes that VCDs that are copied and distributed non-commercially (and are not subject to anti-piracy measures) cannot have been made by professionals, and so cannot be worth watching[1].

Now these rationalisations have been swept away by a counter-current. Video-making by ordinary people has grown explosively. People have discovered what media artist Barbara Lattanzi calls 'self-aware[ness] of the performative nature of their discourse'[2]. Video cameras are becoming extensions of the body, and these cameras have started to penetrate into remote corners and unexpected places. A video presence is slowly but surely becoming part of *der Alltag*. In November 2006, one video made the headlines in many exile media. *The Wedding of the Year*, which documented of the lavish wedding of Burmese ruler Than Shwe's daughter, found its way onto YouTube, causing a huge uproar among the majority of the

[1] This is unlike the situation in communist-era Eastern Europe where anything that was made 'underground' or pirated and distributed freely was considered to be valuable because there was no independent or commercial information available. For example, *Original Video Journal* was a Czechoslovakian samizdat video magazine that was produced under the communist regime to provide citizens with the kind of news they wanted. To copy anything was illegal at that time, hence the word 'original' in the title to make the copies theoretically legal.

[2] On the occasion of the *Video Witnesses Festival of New Journalism*, Hallwalls Contemporary Arts Center, Buffalo NY, which she co-curated in 1991.

MEDIA LINKS:

BBC
www.bbc.co.uk/burmese

Democratic Voice of Burma
www.dvb.no

Irrawaddy
www.irrawaddy.org
(this site hosts the wedding video)

New Era Journal
www.khitpyaing.org

Mizzima
www.mizzima.com

Radio Free Asia
www.rfa.org/burmese

Voice of America
www.voanews.com/burmese

Ethnic-based media organisations can be found at the Burma News International site:
www.bnionline.net

Womens organisations can be found through the Womens League of Burma:
www.womenofburma.org/members.html

A moving documentary film about borders, *The Cross Border*, can be viewed at Shwe Media:
www.shwemedia.org

Burmese population whose most basic needs are not met. For the family of the bride, having the wedding filmed was probably the most natural thing to do. The video is said to have been leaked from within the military (likely from a deposed military intelligence officer). The opposition quickly seized the chance to criticize the junta as being self-serving. Thus the increasing everydayness of the camcorder is easing media out from the control of one of the world's most oppressive regimes.

What we expect to develop next is a need for screening and distribution of media activists' works. Independent media would be fully potent if all the players across the involved sectors collaborated in their efforts. Witnessing, documenting, editing, showing, distributing, collecting feedback, archiving, gatekeeping – the set of tasks is burdensome if done alone, but would be greatly facilitated by an efficient, coordinated system. But collaboration also gives rise to clashes of approaches, objectives, styles, tones and philosophies among NGO officers, artists, activists, media activists, religious missionaries, filmmakers and professional journalists – hence the song at the beginning of this piece. In many ways the Thai-Burma border is an experimental lab where people who have completely different modes of culture must invent a way to act together – creating a Border TV, perhaps. One key factor will be how the many ethnic groups and languages are dealt with. In addition to Burman, Karen, Karenni, Mon, Shan and the Sea Gypsies on the Thai border, there are also the Kachin along the Chinese border, Chin along the Indian border, Rakhine along the Bangladeshi border, and so on. Independent media initiatives in Burma could learn from the fate of Yutel – the first pan-Yugoslav TV station that failed spectacularly because of the complex of ethnic groups and languages involved. How will people in the Burmese borderlands deploy media to turn the multiplicity of languages and ethnicities to their advantage? An example of how multiple media technologies can be effective in borderlands is ambientTV.NET's *Virtual Borders*. The project used video, radio and the Internet to extend the reach of a cultural conference of the Hani-Akha people, once united but now separated by borders (and increasingly, language).

Borders are here to stay. A very carefully considered tactical media is needed.

VIRTUAL BORDERS: COMPLETING THE MEDIA LOOP

Manu Luksch
2004

After completion of the film, I had the opportunity to take it back to northern Thailand. I attended some of the screenings and was more than curious to find out the opinions and reactions of the Akha people...

I am often asked how Akha people like the film, so I'll summarise my experiences from the first screenings I was part of.

January 2004. I'm in a pickup truck making its way up the dusty road to Saen Charoen, an Akha village in the northern Thailand. This village was the first to welcome me into the Akha way of life during their Swing Festival ten years ago, when I spent an exchange year at Chiang Mai University's Faculty of Fine Arts. This is also the village where I made friends with the Jupoh family, whose elder Abaw Buseu is the protagonist of the film.

Abaw's son Aju (author of many of the Akha songs in the film) is driving the pickup, which also carries Noriko Higashide, charismatic Japanese director of an Akha NGO and fluent Akha speaker; Anja Kirschner, my friend from London who was the driving force during the difficult rough cut of the film; and Aju's kids, who grew up in the city and are having fun imitating their grandfather's distinctive eating noises. On the way, Aju suggests a detour to pick up supplies for the required celebration. We stop by a dog dealer, and eventually arrive in the village with a 15 kg dog in a bag and plenty of red dust in our lungs.

After the feast[1] (that Anja preferred to miss out on) and never-ending rounds of fresh home-brewed rice whisky, we start setting up for the film screening. Our cable spaghetti illuminated by a candle and the full moon, we wire up a VCD player and speakers to two daisy-chained TV sets on the stage in the village square. The previous day, Abaw had announced the event through the village megaphone, so many villagers had already gathered, bringing chairs, making a bonfire, and offering around cans of beer.

I'm very excited but also quite nervous about this evening. It took many years to complete the film, and the villagers are the first audience to judge it. Abaw and Aju introduce the project,

[1] See *AV DINNERS 2: In the Year of the Fire Dog*, p. 170 in this volume.

[2] Reciter/teacher

[3] South East Asian Mountain Peoples' Culture and Development







and we start the screening. I wait for reactions. Rather unexpectedly, the whole village bursts into laughter during the opening dinner sequence, in which Abaw Buseu indelibly marks his presence by a prolonged bout of throat-clearing.

Children and the older audience members alike stay glued to the TV sets and visibly entertained for the entire 90 minutes, while the teenage boys take the occasion to get drunk near the bonfire. The response is generally greatly encouraging, but there is an unforgettable moment when a collective sigh of disappointment goes up as the reply of a pirma[2] from China to Abaw's recital of his genealogy fades out. Anxious about the length of the film, I cut the pirma's recitation short after only a few names (the chain of ancestors is over 50 names long) – a mistake that I would later correct in the final version.

While the villagers express much appreciation of my return visit to their village to show the film, and are interested in the VCDs, the discussion following the second screening for the Chiang Mai based Akha community raises a more diverse range of issues.

In Chiang Mai, the screening takes place in the new, velvet-seated cinema of the University Art Museum. The film screening was organised by the SWITCH media lab team, and promoted by Noriko of SEAMP/MPCD[3]. She handed out flyers in Akha language at the night bazaar, explaining the event to every Akha person she encountered. Announcements were also made on the Akha radio programme.

However, this being many Akha people's first invitation to a cinema, and with many not quite catching the address properly on the radio, we learn that a lot of eager viewers couldn't locate the venue. For the second screening, Anja and Nok (from SWITCH) respond by drawing huge posters depicting an Akha woman with traditional headdress and a movie camera, to indicate the site to literate and non-literate visitors alike. Noriko chairs the event.

There are many questions to Asseu Somsri Dzuebaw Jupoh, the radio presenter who was involved in all three phases of *Virtual Borders*: Internet, radio, and film. Asseu joined us during our trip to China, where we attended the International Conference on Hani-Akha Culture. There, she conducted many interviews with Akha people from different countries. Asseu has worked as radio presenter for over 40 years; her voice is very prominent

amongst the Akha, and the film audience enjoyed seeing the face behind it, as well as watching her at work.

Some audience members commented on the many levels of collaboration between Akha and non-Akha seen in the film – the Internet-radio link, the hybrid soundtrack, the film project as a whole – and suggested such approaches as a way to develop future perspectives. An Akha woman said that the film reminded her of just how many issues affect the situation of the Akha, regarding it as a helpful summary from where to pick up discussions and develop active approaches. One Akha man remarked that films showing traditional life in more detail should be made as educational materials for Akha and non-Akha. A young visitor asked if there would be more occasions to see the film, because he wanted to bring his friends.

Delighted by the overwhelming response, I was particularly happy about the way that *Virtual Borders* brought together people from two of my zones of focus over the past decade – community networks and media cultures. I hope the project serves as one timber in the bridge that is slowly being built between these cultures.







Flyer for Party with Purpose (London 2008), an initiative by Emma Phillips in support of Akha community projects in Northern Thailand

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Manu Luksch
2005

Call for works. *FLY STORIES* was commissioned for *Fly With Me To Another World*.

www.flywithmeproject.org

FLY STORIES program: *Brilliant City* (Axel Stockburger, Mike Faulkner, Matthias Kispert, UK 2004); *Burning Man as seen by a mammoth* (Piltdown Camp, US 2004); *Cease! Fire!* (Kaw Lah Film collective, TH 2004); *Fast Film* (Virgil Widrich, AT/LU 2003); *Foliage Chorus* (Manu Luksch/ Shobana Jeyasingh Dance Company, UK 2004); *In the Beginning was the Eye* (Bady Minck, AT/LU 2003); *Just A Second* (Santiphap Inkong-ngam, TH 2005); karaoke videos including *Ase Wawi* (Akha pop, TH), *Chengbo* (Akha pop, CN), *Mong bor dai ya* (Hmong pop, TH); *Mecanomagie* (Bady Minck, LU 1996); *Namaste Project* (Eric Filion, CA); Project documentation by Paris-based architects exyzt; *Stealth* (George Piper Dances, UK 2004); *The Josef Trilogy* (Thomas Worschitz, AT 2004); *Une Double Mort* (Alain Bourrillon, FR 2000); *Virtual Borders* (Manu Luksch, UK/AT 2003); *Yong in Transition* (Santiphap Inkong-ngam, TH 2004)

FLY STORIES

Migration, Movement, Mobility: Road Cinema and Film Workshops in Northern Thailand

ROAD CINEMA
'Road cinema', the screening of films from trucks in village places, was once commonplace in Thailand. As multiplexes opened in shopping malls on the outskirts of towns, the process was turned around: the cinema had previously driven to its audience, now the audience had to drive to the cinema. Not only are multiplexes disproportionately expensive for, and geographically out of reach of, those living in remote and/or deprived rural areas, but also their programming is limited to mainstream productions from major studios.

MIGRATION, MOVEMENT, MOBILITY...
Northern Thailand has hosted a rich variety of regional, semi-nomadic cultures in its long history as a dynamic crossroads of trade and migration. Current political discourse around culture and identity follows global trends by focussing on the question of immigration. The key event in migration and immigration is the movement of bodies across borders, but this is not the only type of movement that has political significance. With Thailand's 'shift to an information society', mobility of one sort (the mobility of data) is becoming highly valued, but the physical mobility of semi-nomadic peoples and refugees from regional conflict constitutes a political 'problem'.

FLY STORIES returns film as a means of storytelling and social happening into the public sphere, by touring an eclectic selection of international films that inform, raise questions and elicit responses to facts and fantasies of movement and migration. Film dialogues are interpreted live into Thai. The project also offers workshops in digital filmmaking.

FLY STORIES is part of *Fly With Me To Another World* (February-July 2005), a Lamphun-based project to build bridges between generations and art genres, and between professionals and the local community.

MANU'S *FLY STORIES* BLOG

Manu Luksch
2005

Twelve is considered a lucky number in Thailand. In spite of being bitten by 12 mosquitoes as I write this line, I believe so too. It is 12 months since the idea for FLY STORIES *was born in Chiang Mai. I had returned from screening* Virtual Borders *in a mountain village and met Thai artist Navin Rawanchaikul (with whom I became friends 12 years ago) over a bowl of spicy chicken soup (12 baht). Navin was about to begin work on the art+community project,* Fly With Me To Another World...

Chiang Mai, February 2005

I arrive at Deuleu's paradisal teak house compound, which hosts her family, the Golden Triangle Akha handicraft workshop and store, and MPCD, the first NGO to support mountain people in Thailand. 12 years ago, as a student at Chiang Mai University, I spent lots of time here, researching and making friends for life...



The following day

I join Navin on his way to Lamphun, where a scooter gang is visiting his exhibition at Hariphunchai National Museum. Through media coverage of Navin's project, the gang have discovered their hero in Inson Wongsam, who made an art-road trip from Bangkok to Florence on a Lambretta in the 1960s. It's fun to watch them relating to all the historic info about Inson's trip, but totally ignoring all the artistic intentions of Navin's show.



The evening before departure...

...of the *FLY STORIES* mobile cinema. Checking equipment and getting hold of the Lambretta, which Inson has turned into a symbol: low-technology driven by sheer willpower.





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15 February

Ong, Bo and I leave Chiang Mai at 6 am...get lost in the mountains in the Mae Salong area...and arrive in Saen Jai Mai village 12 hours later, just in time to set up the cinema. The village hosts an Akha pirma (reciter) meeting, attended by around 50 elderly pirma from Northern Thailand.

The programme begins with a film from an Akha village in Lao PDR, which shows amongst other things a woman putting on her headdress the 'old way'. The watching kids giggle their heads off, and when she spits on her comb before parting her hair, they insist on a rewind ;-).





Later on, we show *Virtual Borders* in the presence of its protagonist, with live commentary by Deuleu. This is followed by *Une Double Mort*, which was filmed in the neighbouring village several years ago. The local shopkeeper had played the role of 'traditional young man' in this film, but had never seen it before. The evening ends with Akha karaoke video clips and plenty of rice whisky.





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18 February

Amidst Buddhist celebrations and a fair, *FLY STORIES* is officially launched at Suan-dok Temple, Chiang Mai. After a well-attended screening of *Yong In Transition*, Navin and I introduce the project to a mixed audience of international symposium attendees and Thai fair visitors. The DVD and projector are put on top of the Lambretta, next to an old-style cinema truck that provides the sound – and, most importantly, hosts the live narrator, who reveals himself as an entertainment genius during the screening of *The Josef Trilogy*. This rather

dark, claustrophobic Austrian film about five woodcutters who desperately want to emigrate from the Alps to Canada seemed somewhat risky programming amongst all the other attractions (food stalls, live pop bands...). However, only minutes after the interpreter has started to live-dub the film, the Thai-speaking audience burst into laughter: not only does he create sounds and voices in the most funny way, he also improvises side-stories and jokes. Inevitably, the non-Thai speakers ended up laughing with the laughter of the others ;-).

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19 February

The screening is hosted by Noi and Manuel Lutgenhorst at esc (EmptySpaceChiangmai), 30 minutes outside the city and near artist project *The Land*. At esc, we're welcomed by a group of local musicians – none over 10 years old – playing traditional Lanna instruments. Noi presents the results of a video workshop, which involved teenage students from Bangkok interviewing villagers in the neighbourhood of esc about environmental issues.

The music and video attract many locals, who stay on for *Stealth*, a skilfully made three-minute dance video which provokes a storm of applause. This then leads interestingly into the hair-raising documentary *Cease!Fire!*, which was filmed at the Burmese border. The filmmakers have come all the way from the border for questions after the screening – an offer taken up by the audience for the next few hours. It's probably the most energizing Q&A session I've ever experienced. Note: *Cease!Fire!* is only available directly from the makers (kawlahfilms@hotmail.com).



The last night...

...of screenings throws us again into a totally different world, one of partying and dancing and excited goodbye chatter and a shadow theatre performance by Wandering Moon. This all takes place on a lawn behind the Chiang Mai Art Museum. We project *Just A Second*, *In The Beginning Was The Eye*, exyzt's compilation of architectural intervention videos, and, when the DJs turn the site into a dance floor, *Namaste Project*.



Finally,

I spend a few days in Bangkok with Navin and the city's most feared cultural critic Alfred Pawlin, who lives behind a door made by none other than the artist Inson – who was the starting point of this whole trip :–).





3／YOU CALL IT ART
WE CALL IT INDEPENDENCE

"The Internet has made the local global – but it has made it easier to talk to people across the world than to those across the street.

"Once, people knew every tree in the forest; they could fix the things in their houses. Now if a computer breaks down, most people rely on others to repair it. When you get involved with something like a wireless community network, you're faced with the challenge of taking control of your environment again, and of course, you start to do this locally."





Quote left: Manu Luksch

This page: Ma'am (designed by Nick Dewolf and Harvie Branscomb) at Burning Man 2004, Nevada.
Photo: Yayoi Wakabayashi

go glocal

GO GLOCAL!

When New Labour announced their policy aim for the UK to be the leading nation in terms of broadband infrastructure by the year 2005, the resulting media buzz rendered the term broadband into daily vocabulary. However, a recent report about broadband penetration by the OECD listed the UK 22nd out of 30 nations. 28 people out of 1000 use broadband in the UK, compared to over 140 per 1000 in the leading nation, South Korea. In the UK, delays in provision and high prices have left the netizens feeling short-changed. Some have taken matters into their own hands.

In the last few years, some of the more technically-minded Internet users have experimented with data transfer using microwaves in order to enable fast, cheap, and wireless access to the Internet. Fast, because under an internationally agreed protocol named IEEE 802.11b, microwave transmission has a theoretical bandwidth of 11 Mbps – that's over 20 times a typical ADSL (wired broadband) connection. Cheap, because a broadband connection can be shared among many users, and a portion of the microwave frequency spectrum – around 2.4 GHz – is available for use without licence.

Networkers with broadband who want to share their bandwith create a network node by installing an antenna on their roof or windowsill. The antenna connects to a dedicated traffic-control computer called a router, which in turn is linked to the broadband connection and the networker's other computer systems. Anyone with an antenna that is in line of sight of the first antenna can log on to the Internet through a microwave link between the antennas. Some laptops and palmtops have antennas built in. This convenience and speed comes relatively cheaply – with some care, a good antenna can be made at home, and the required wireless card bought for less than £80. And for the router, you can reconfigure an obsolescent PC like those that are regularly thrown out by offices.

Manu Luksch, Mukul Patel, Ilze Black
2001

Introduction to a radio programme investigating DIY wireless network initiatives in London and New York

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Adam Burns and Manu Luksch on the roof of Regent Studios (poster) Original photos: Chris Helgren

Surfing as free as a cloud

On Sunday morning, a week later, news of another node from an unlikely source proves it's not just geeks wiring the East End. Father Alan Green, the rector of the Church of St Johns in Bethnal Green has just returned to the rectory from a local Sunday school. He has recently given approval for one his tenants in the church crypt, Martin Kavanagh, to set up an antenna in the bell **page 7 ▸**

◂ page 3 tower built by Sir John Soane in 1826.

Like many priests, Father Green faces a dilemma. The church is broke. Earlier this year, the Archbishop's Council announced a plan to offer the use of Church of England steeples to mobile phone companies wanting to erect new masts. It would bring in much needed cash, but Father Green is a progressive priest, and he thinks there may be another way to connect the church to the wireless age.

"We are really keen [on the data cloud] because it combines our notions of helping the community and how to use the building itself. Here we have an enormous tower that precisely facilitates what is needed.

"I suppose we could make money if we allowed a mobile phone mast to be installed in there," he admits, "but on balance, what we must offer is a commitment to the community, so the wireless idea is the cleverest I think."

Excerpt from Sean Dodson's 'Surfing as Free as a Cloud' in The Guardian, *20 June 2002*

ON FREE WAVELENGTHS: WIRELESS NETWORKS AS TECHNO-SOCIAL MODELS

Armin Medosch

2003

Introduction

This article describes the early days of the Consume project and related wireless community network initiatives in London. Consume[1] developed a practical network utopia, a workable model, which sets it apart from much of the hype and hope that has surrounded the Internet[2].

In essence, the Consume concept involves using self-administered open wireless networks to leapfrog the services offered by conventional telecommunications companies[3]. The 'last mile', the cable connecting the nearest exchange with the homes of the users, becomes the 'first mile', the self-administered zone of a network managed by the users themselves. This is made possible by the existence of open standards, licence-free bandwidth and WLAN technology based on IEEE 802.11 standards[4].

I hope to show that the key difference here is made not by this or that specific technology, but by the attitude of those involved. Inspired by experience with free/libre and open source software (FLOSS), a network ethics emerged – a habitus[5] in dealing with new technologies that is shaped by social and cultural values. On the basis of this habitus, attempts were made to build a Network Commons, a network that does not obey the logic of the market, but where services are rendered on the basis of barter and gift economies[6].

The social structure aimed for is one of decentralized self-organisation. The history and impact of these projects highlight a different way of dealing with technology. However, the idea of a 'different' approach still implies that technology is an autonomous field, subject only to its own laws. It is therefore important to emphasize that wireless network projects of this kind also open up the prospect of a reformulation of the fundamental character of technology. A culture based on grassroots democracy and participation gives rise to alternative goals for technological developments and for the embedding of technologies within social contexts[7].

Translator: Nicholas Grindell. First published as 'Auf freien Wellenlängen: Funknetze als techno-soziale Entwürfe' in B. Lutterbeck, M. Bärwolff & R. A. Gehring (eds.) *Open Source Jahrbuch 2006* (Lehmanns Media: Berlin 2006) and downloadable at www.opensourcejahrbuch.de/download/jb2006 Portions previously published in English as the essay 'London.ZIP' for the *DMZ* Festival (London 2003)

[1] http://consume.net

[2] See, for example, Kevin Kelly *Out of Control: The Rise of Neo-Biological Civilization* (New York: Addison Wesley, 1994). Kelly is former executive editor of *Wired* magazine.

[3] See the Consume Manifesto of 2000, available at http://dek.spc.org/julian/consume/consume.html

[4] WLAN stands or Wireless Local Area Networks. The corresponding technical standard, part of a family known as IEEE 802.11, was originally adopted in 1997 and has now been extended to include a group of

related protocols. For details, visit the Internet Engineering Task Force (www.ietf.org) and the Institute of Electrical and Electronic Engineers (www.ieee.org). In principle, any networking technology can be used.

[5] See Pierre Bourdieu *The Field of Cultural Production* (London: Routledge, 1993).

[6] See Armin Medosch *Freie Netze. Geschichte, Politik und Kultur offener WLAN-Netze* (Heidelberg: dpunkt, 2003).

[7] See Armin Medosch 'Die Gesellschaft im Ad-hoc-Modus' in C. Bieber and C. Leggewie (eds.) *Interaktivität. Ein transdisziplinärer Schlüsselbegriff.* (Frankfurt & New York: Campus Verlag, 2004). Available online in English as 'Society in ad-hoc mode: Decentralised, self-organising, mobile' at http://data-browser.net/01/DB01/Medosch.pdf

[8] On network topology in general see Albert-László Barabási *Linked: The New Science of Networks* (Cambridge MA: Perseus, 2002).

METHOD

In analytical terms, the approach taken in this article is based on the layered structure of networks[8]. From a technical point of view, the Internet is determined by the properties of two protocols, the Transmission Control Protocol (TCP) and Internet Protocol (IP) – known collectively as TCP/IP. These protocols enable communications within the Internet across different technical networks and platforms. In the layered model of TCP/IP these protocols form the 'network layer', with an applications layer on top and a layer containing physical connection paths underneath. The analytical model proposed here could be extended to include further layers on top of the applications layer, such as an organisation layer, or one covering emotional links.

It is important to keep in mind which of these layers is being discussed at any given point. Each layer has different forms of encoding and distinctive inner structures, and each is also influenced by external factors, including regulatory frameworks. The analytical approach using the layer model permits a discussion of forms and structures within networks that remains rooted in the material reality of the networks. Of particular importance for this study are network topologies, the arrangement of the nodes in the network and the character of the links between them[9].

In the exceptional case of the combination of peer-to-peer networks with socially decentralized structures, the technical and social topologies actually do coincide. I say 'exceptional', because in many cases where causal relations or even strong analogies are posited between the technical and social layers of a system, it is as an outcome of a (perhaps unconscious) belief in technological determinism. For this reason, it needs to be made clear from the outset that what we are talking about here is not technology and its cultural impact, but cultural techniques on the one hand, and technical cultures on the other. The technical is understood here in an extended sense, as an organising principle that brings together social and material aspects – the work of machines and the work of human beings – in the transformation of both matter and information. It is only in terms of this re-socialized notion of technology that we can speak of the overlapping of the technical and social network topographies. Network utopias are produced not by the ghost in the machine, but by the active endeavours of groups of people working under specific conditions.

Consume

Trip the loop, make your switch, consume the net![10]

PREHISTORY AND EARLY DAYS

The idea for the Consume project arose from experience gained in the Clink Street community in Southwark, London, which for several years was a hotbed in the fields of music, web design, technological development and art. A former warehouse and nearby buildings on the banks of the Thames housed record labels like Ninja Tune, new media companies like Obsolete, and more art-orientated groups like I/O/D and Audiorom. The social focus of the Clink Street community was Backspace, a cross between an Internet café and a Net art gallery.

Internet bandwidth was then very expensive and only businesses could afford a permanent high-bandwidth connection through a dedicated leased line. James Stevens, founder of Backspace, convinced former colleagues in a commercial website company upstairs to share their 512 kbps connection (which allegedly cost EUR 60,000 annually). Backspace and the other tenants of the building were linked to this connection via a local cable-based network.

For many, Backspace was like a home from home, a public living room where they came to work on projects in a collaborative atmosphere. Run as a shared resource, users were responsible for the maintenance and upkeep of the infrastructure. The World Wide Web was still relatively young, the need for learning and exchange was great. Backspace became a place for digital network culture, a space to trade ideas at the local level, with links to other network culture scenes worldwide via conferences, mailing lists and live streaming events[11].

It was the relatively fast Internet connection that allowed Backspace to stream live audio and video, in addition to hosting websites for individuals, groups and projects. Live streaming from home was unthinkable at the time, no one could afford it. Internet activists at Backspace took part in the net.radio jam sessions organised by the Xchange Network[12] and streamed 'almost live' TV from the J18 Carnival Against Capitalism demonstrations in London on 18 June 1999.

Just across the road from Backspace's home in Winchester Wharf, a few more artists and new media businesses located in Clink Street Studios also wanted to participate in the sharing

[9] Compare this 'network materialism' with Lev Manovich *The Language of New Media* (Boston & London: MIT Press, 2001).

[10] Consume slogan

[11] These contacts included other 'hothouses' of the network culture that emerged in the mid-1990s such as Desk.nl (Amsterdam), Ljudmila (Ljubljana), Public Netbase (Vienna) and The Thing (New York, Berlin, Basel, Vienna). In 1998, the *Art Servers Unlimited* conference (http://asu.sil.at) brought together representatives from projects of this kind for a workshop lasting several days at Backspace.

[12] The Xchange Network and mailing list was established in Riga in 1997, and is online at http://xchange.re-lab.net/m



Carnival Against Capitalism, 18 June 1999
Photo: Manu Luksch





Backspace in 1998
Stills from the **Art Servers Unlimited** ***DVD (Manu Luksch & Armin Medosch 1998)***

of precious bandwidth. But the Telecommunications Act of 1984 prohibited them from throwing a cable across the narrow street to connect with Backspace's local network. Julian Priest, then technical director of the company Mediumrare, suggested a wireless solution. The technology now known as Wi-Fi or WLAN (then, brand new in the commercial world) was used to establish a connection between the two buildings, a bridge through the air that served well for many years. About 100 bandwidth-hungry users spread over two buildings shared the benefits of a high speed local network with a gateway to the Internet. Creativity, art and new media business flourished. It was this local experience of the power of wireless that would later encourage James and Julian to launch Consume.

The weird thing was that you very often got the whole thing to yourself, which is how we learned about contention, i.e. you can share a network without really noticing the speed drop off. Now, when you buy ADSL in the UK, you share your 512k with between 20 and 100 users. That's a contention ratio of 20:1, which is how the price is so low. If you buy real dedicated bandwidth, then it's way more expensive.[13]

THE CONSUME MANIFESTO

Backspace was forced to close in 1999 when the building was sold in the course of rampant property speculation. Although bemoaned by many at first, the end of Backspace created the opportunity for a new beginning. In Clink Street, James Stevens and Julian Priest had learned about networking the local community and gathered experience with WLAN technology.

The wireless network had also been used as an intranet (internal network) for broadband and multimedia applications. Further inspiration was drawn from the reports about peering agreements between Internet providers presented at Backspace during the *Art Servers Unlimited* conference in 1998[14]. Peering between providers means that they transport data traffic for each other without charging each other for the volume of data carried. The more peering agreements a provider can make, the lower the costs for Internet bandwidth.

We had talked on and off about peering and wireless over those years, and of course spent lots of time scrabbling about with cabling and crimpers. In the summer of 2000, I was coming back on a train from Cornwall and I wrote some notes which outlined most of it, came back and showed it to James, and we sat down and wrote this text together, and put it up on consume.net[15].

[13] Julian Priest, in an email to the author (2003)

[14] http://asu.sil.at

[15] Julian Priest, email (2003)

This text – the Consume manifesto – described James' and Julian's ideas for a free network, a network that would be built and maintained by its users[16]. It suggested the use of WLAN technology based on the IEEE 802.11 standards to jump over the local loop and create neighborhood networks outside the commercial provider model. Local networks would wirelessly connect to each other and thereby create an ever growing free network cloud of data – a public MAN (metropolitan area network). Inside this cloud, users would enjoy the benefits of a high-bandwidth connection without having to pay fees to owners of cables such as British Telecom. File-sharing, gaming, audio-visual media and communications experiments of all kinds would blossom in the free network. At its borders, the network would be connected to the Internet. Those in possession of a broadband connection would share it with other users for the mutual benefit of all.

The Consume concept drew on the idea of the Internet as a 'network of networks', a structure created by linking up many separate networks. In principle, each node in this network has the same status, as a peer among other peers. The connections between these nodes are always two-way connections with the same capacity. The Consume concept uses this egalitarian principle that is inherent in the Internet's architecture (but which has been masked by its commercialization) turning users into (self-)providers. The network grows not as a result of centrally controlled planning and capital investments, but as a result of the accumulated actions of many individuals.

So we scribbled down this quite lengthy paper, with our expectations concerning such a network. It was to provide ownership of network segments to self-provide those services; it was about the redistribution of wealth or access or whatever the actual medium is. [...] I think obviously that script was quite potent, because an awful lot of people picked up on it or glued it to their own ideas or took a hint from it and went ahead and established this whole family of Free Network initiatives.[17]

THE CONSUME METHOD

Not content with writing a manifesto, Consume immediately put ideas into action, building components of the proposed network and organising workshops. Their method deserves to be examined in its own right as the basis for something like a 'Consume operating system' – above all because it proved to be a method that could be copied and transferred.

[16] http://dek.spc.org/julian/consume/consume.html





Starbucks, formerly Backspace
Photos: Bill McAlister

[17] James Stevens, in an email to the author (2003)

Vital to the method were the workshops, or 'Consume Clinics', where people interested in the Free Network idea would meet, discuss ways of developing the network, and actually build the hardware needed to handle wireless traffic – antennas, routers and access points. What was clinical about these sessions was above all the approach to hardware. Consume attempted to give a practical demonstration of how wireless networks could be built using a DIY approach. Instead of buying off-the-shelf commercial solutions, the components for the network were assembled using cheap, standard electronic components and second-hand hardware. 'James drove up to the warehouse for the main Orinoco importer and bought a load of wireless network cards, materials for antennas and other parts.'[18] Old PCs were reconfigured as wireless routers and access points. In some cases, this involved using several old computers to assemble a single functioning new one. 'At the end of the session, there were a couple of nodes, one on Linux and one on BSD, and a huge stack of PC carcasses, and empty Coke bottles.'[19]

[18] Julian Priest, email (2003)

[19] ibid.

The Clinics drew an inner circle of network enthusiasts, who got down to work on sensitive configuration problems[20]. But they also served as open forums for informal exchange and making contacts. Consume never aimed to build an extensive wireless network themselves, working instead primarily as a technical and cultural avant-garde. They demonstrated how it could work technically and how the associated forms of social organisation might look. The emphasis was on individual responsibility and initiative, and a DIY attitude to learning and passing on knowledge. As in the early community of Internet developers, the approach was based not on lengthy political discussions and voting mechanisms, but on 'loose consensus and functioning code'.

[20] One problem was the shortage of Internet addresses. The transition to the new Internet Protocol (IPv6) should improve matters, but is advancing slowly.

The Consume idea had legs and the notion of the Free Network was picked up by many and carried off in different directions. Internet tools such as mailing lists, a wiki and the Consume Node Database helped to coordinate these efforts and allowed them to make an impact nationwide. Consume also became involved at an early stage in policy discussions on the subject of spectrum regulation, but refused to become a legal entity for the official representation of community networks. They insisted that only decentralised uptake of the idea and self-organised network development could guarantee that it remained uncompromised by bureaucratisation or commercialisation. An official Consume organisation could become a target for

legal action or takeover attempts. A decentralised network built on consensus between many independent owners of small network fragments was the favoured model. The network should grow in the same way that a tune is 'collectively' invented and developed in freely improvised music.

EAST END NET

Now I would like to zoom in on a specific period in a local cluster in London's East End. This part of the city is home to free2air[21], an open wireless network node that was created around 1999, independently of Consume, and which can claim to be the oldest free and open wireless network node in Europe. In the winter of 2001–02, the Consume idea was particularly virulent. Loosely united by it, but in many respects working independently, free2air, the artists of ambientTV.NET, *Mute* magazine's *YouAreHere* project[22] and a number of other individuals and groups developed a project to build a wireless backbone[23] for the East End. The idea was to link four points (Limehouse Town Hall, Brick Lane, Shoreditch/Hoxton and London Fields) that enclosed an area populated by artist's studios, new media companies, shared office spaces, and cooperatives – fertile ground for Free Networks. The East End Net was to demonstrate the feasibility of the Consume concept on a large scale.

free2air

free2air is based in an inconspicuous house at the end of Hackney Road, between shops selling cheap overseas phone calls and halal fried Chicken. For years, a laptop named Groundzero and an omnidirectional antenna on the roof of the building have ensured the existence of a friendly 'data cloud' that provides the whole of the surrounding area with connectivity. The credit for this facility goes to the Australian Adam Burns, also known as vortex. With a background in IT security, he began experimenting with wireless networks in 1999, although his interest in Free Networks goes further back, stemming from the days of the mailbox and early Internet scenes in Australia. Using wireless networks based on the 802.11 standard, vortex saw the possibility of reviving these old ideas. free2air was launched without knowledge of the existence of Consume, but is based on a similar set of ideas, and its name makes a compatible political statement[24]:

free2air is a contentious name. Basically it has a dual meaning. Firstly, once you have established such a network the cost of information travel is free. It's not a totally free service



Directional antenna on the roof of ambient.space
Photo: Chris Helgren

[21] www.free2air.org

[22] www.metamute.org

[23] 'Backbone' is the term used for a network whose function is to bridge large distances and to help connect other networks.

[24] See Saul Albert's interview with Adam Burns in *The Sarai Reader 03: Shaping Technologies* (New Delhi: Sara Media Lab, 2003).

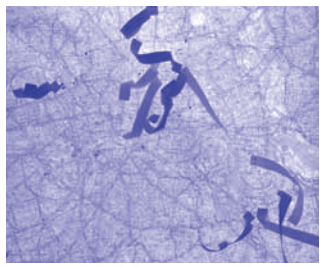




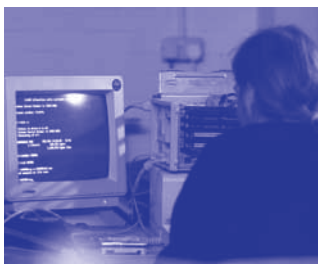






Wireless antenna building workshop at ambient.space, 2002, with Saul Albert, Ilze Black, Alexei Blinov, Darron Broad, Adam Burns, Manu Luksch, James Stevens, Simon Worthington, Ten Yen, Rolf Gehlhaar, among others. Photos: Chris Helgren




to establish, you need to buy hardware, you need computer expertise, and so on. But the ongoing costs are minimal. And secondly, what I liked about it is the plans for a distributed, open, public access network, getting rid of the idea of a central ISP. In the context of the Internet today, there is a strong global tendency towards control of content. How does something get 'air'? So there is a double meaning to free2air: it also means you are free to air your opinion.[25]

[25] Adam Burns, in an interview with the author (2003)

free2air is designed as an open network for public use. As a security expert, Adam Burns places particular emphasis on the political implications of the configuration of a network. free2air uses none of the methods for the authentication or registration of users that are provided for in the wireless network standard[26] – it is truly as free as air. Anyone with the right 'nose' can sniff out access to free2air – no password, no registration.

[26] Such access control methods include WEP and WPA encryption and MAC address filters.

You want to avoid the 'Halt, who goes there!' moment. It is that point, philosophically speaking, that we want to keep open. A packet passing through the network is like a passenger passing through the transit lounge of an airport. It does not have to show a passport to get to the next destination. But packets don't really wait very long, so maybe it's not the best metaphor, but it shows the difference between transit traffic (that just sits in the lounge and then passes on) and incoming traffic, a packet wanting to come into your little country which you then regulate with access control, authentication, and authorization.[27]

[27] Adam Burns, interview with author (2003)

Years of uninterrupted operation of the free2air open node is proof that free public-access wireless networks can exist.

ambientTV.NET

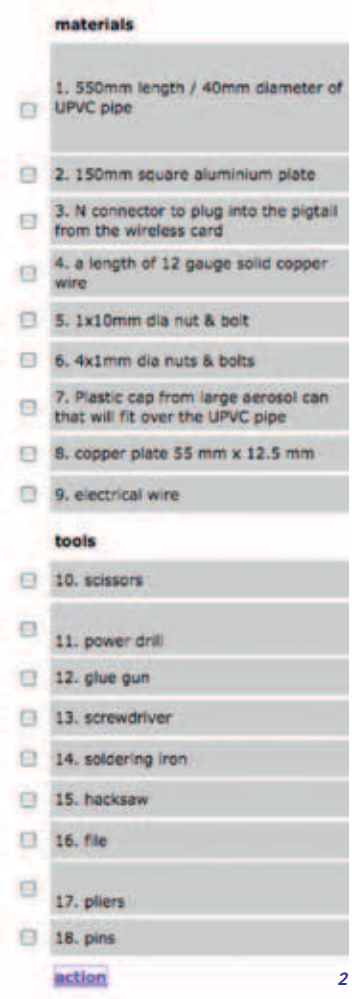
Around 500 metres from the free2air base station stands Regent Studios, a former workshop complex that now consists mainly of studio spaces. And on the top floor of the building is ambient.space, from where the artist group ambientTV.NET had been watching the growth of the Consume project with interest. When initial tests in late 2001 showed that free2air was accessible from their studio, this interest turned into activity. ambientTV.NET sent out an email to institutions appealing for donations of obsolescent computers that would otherwise have ended up on the scrapheap. Soon afterwards, thanks to the LSE, Reuters, and the National Aids Trust, their space was overflowing with antique machines in various



1

states of usability. A series of workshops was organised, well remembered because they brought together not only key Free Network initiatives – Consume, free2air and *YouAreHere* – but also many individuals, including Alexei Blinov from Raylab, Jasper Wallace, Ian Morrison, Darron Broad, and Ten Yen. These sessions ended with familiar scenes – gutted computers, parts and tools strewn about. And out of the junk rose phoenixes of new access points, routers and antennas.

Since early March 2002, there has been a wireless connection between ambientTV.NET and free2air. Apart from its use by the ambient.space studio, the connection is shared with the rest of Regent Studios via Ethernet cables, augmented with another link to the Internet, and re-broadcast towards London Fields via an omnidirectional antenna. ambientTV.NET initially developed an interest in wireless technology because it enabled them to use an existing ADSL connection more efficiently and share the costs with others. 'But then the focus shifted,' explains Manu Luksch, 'the practical aspects became secondary, social and creative aspects took priority'.



2

In my view, there is a disturbing lack of vision running through governmental and business organisations, due to the fact that they are trained to focus on short-term results. For me, the greatest value of these experiments with islands of wireless connectivity is that they are first steps towards the development of many self-generating, dynamic and distributed IP network structures. These interwoven networks have the potential to generate an entirely different, more diverse Internet structure.[28]

Today, ambientTV.NET's interest in Free Networks is primarily artistic, and their participation in the East End Net illustrates how Net art projects and Free Networks can benefit each another. On 23 March 2002, ambient.space hosted a live event with art music group Meta4, the first event to be broadcast live via wireless over the East End Net. Encouraged by the success of the network, ambientTV.NET went on to develop a number of media art works that incorporated it, and its infrastructure has supported other artists' projects such as Kaffe Matthews' *Radio Cycle*.

THE RISE OF CONSUME

Consume was very successful as a catalyst for ideas and in helping interested people to find each other. A few months after the publication of the Consume manifesto online, the



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[28] Manu Luksch, email to author (2003)

1
Mukul Patel collecting 'obsolete' computers
Photo: Manu Luksch

2
Material list for DIY antenna
From the* ambient.wireless *website

3
Darron Broad & Ten Yen configuring routers at ambient.space
Photo: Chris Helgren

first article about Consume appeared in a major newspaper[29]. Previously, media accounts of the rise of wireless Internet had been completely dominated by pieces on the practice of 'war-driving' (locating and logging unprotected, usually corporate, wireless networks) and 'piggybacking' (siphoning off available bandwidth for personal use). Consume managed to transform that perception. The BBC, the *Wall Street Journal* and other major media outlets reported the irresistible growth of wireless community networks in London, New York City and Seattle. This in turn mobilised many more people to become involved in the movement. Consume built a database with a visualisation tool, the Consume NodeDB, where owners of wireless networks could register their nodes with exact geographical location and access details. From a few nodes in the year 2000, this database grew to more than 3,000 entries in 2003.

[29] On 12 October 2000, *The Guardian* published a piece entitled 'Free as the air we breathe' by Sean Dodson. This article heralded a sea change in reporting on 802.11 technology. Previously, the focus had been on security aspects – stories about evil hackers armed with laptops and antennas made from Pringles cans marauding through the streets and stealing bandwidth.

It seemed that the zeitgeist had caught up with the Consume concept. Many who were disappointed by the exaggerated promises of the Internet boom of the late-1990s were looking for something that involved networks but which did not speak the language of Internet hype. Projects inspired by the Consume method emerged in various parts of London, in Wales, on the Isle of Wight and in the north of England. The idea fell on particularly fertile ground in places where broadband Internet was not available for various reasons, such as distance from urban centres. But the idea was also adopted by community initiatives in many cities with the hope that networking might help to counteract social decline. A workshop by the name of BerLon (Berlin-London) in Berlin in October 2002 provided an opportunity to present the Consume method in Germany. This event prompted Berlin initiatives to become better organised, resulting in projects such as Freifunk[30], the WaveLoeten meetings, and the Berlin Backbone project, all of which in many ways count among the avant-garde of the Free Network movement.

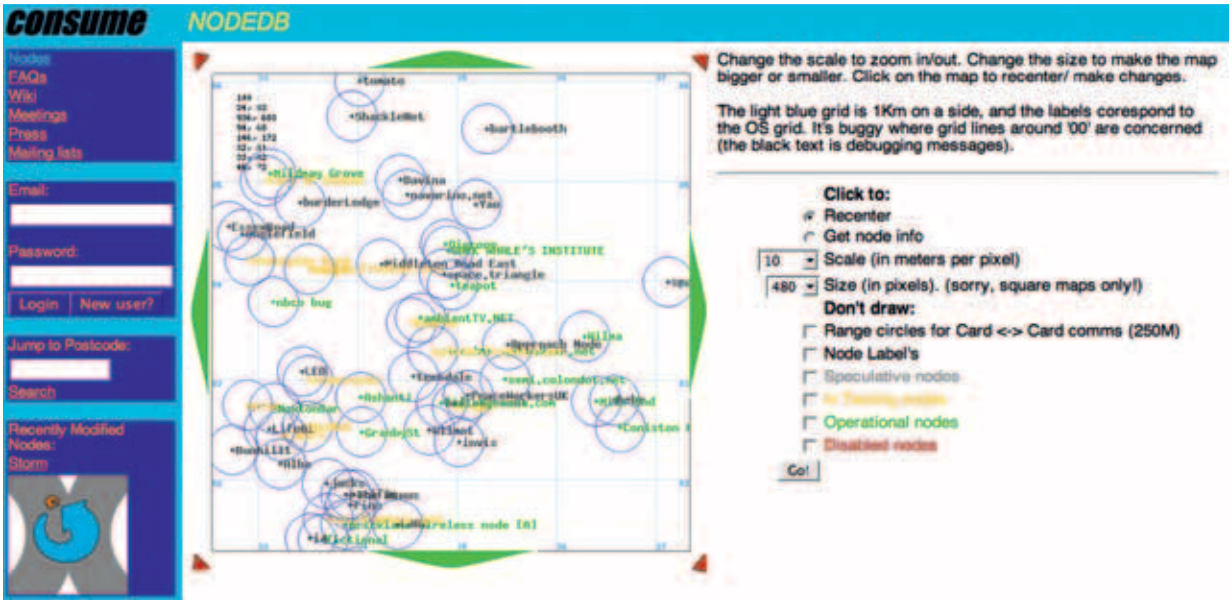
[30] www.freifunk.net

The Network Commons

FREE NETWORKS AS AN OPERATING SYSTEM

In industrial societies, infrastructure is traditionally the domain of the state and of large companies. Consume wanted to show that this does not have to be the case. 'You can also take a grassroots, bottom-up approach, almost literally, on every level.'[31] Unlike cellphone networks, for example, which are centrally planned, built, administered and operated with the aim of maximizing profit, Free Networks are based on the

[31] James Stevens, email (2003)



model of Network Commons – a special form of the 'Digital Commons' which came to occupy a central position in recent discussions on intellectual property[32]. The use of the term 'Network Commons' underlines the fact that what is at stake here is not just technical networks as carriers of information but also the creation and improvement of options for human action. For the Network Commons to come into existence, a series of conditions must be given.

Probably the most important condition is the existence of open standards. Internet communications are based on the Internet protocols TCP/IP[33]. Although their development was originally commissioned by the U.S. military, the results of this work were made available to the public. On the basis of this tradition, all Internet protocols are free and publicly accessible. Of equal importance is the existence of Free Software and the licensing system that protects it, the General Public Licence (GPL)[34]. Thanks to the viral character of the GPL, there is a growing pool of Free Software, from the GNU/Linux operating system to a wide range of network services through to applications. Most key Internet functions can be provided without needing to use proprietary software. The third condition is a free transmission medium. Wireless networks based on the WLAN standard exploit a portion of the spectrum, the ISM (Industrial, Scientific and Medical) band, which can be used without licence[35]. And finally, Free Networks

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CONSUME node database http://nodedb.consume.net/nodedb.php

[32] See V. Grassmuck *Freie Software* (Bonn: Bundeszentrale für politische Bildung, 2002).

[33] Internet protocols are formulated as so-called 'requests for comment' (RFC). See www.rfc-editor.org

[34] The GPL can be consulted online at www.gnu.org/licenses/licenses.html

[35] For more detail on frequency regulation with regard to WLAN, see Medosch *Freie Netze* (2003).

depend crucially on social motivation and connection protocols. For something to be called a network at all, there must be more than one node – connections must be established. This process involves finding partners willing to link up and then working with them to build a network. The necessary rules are established via processes based on the principle of self-organisation. The Network Commons draws on the desire to create a network based on free cooperation and self-made rules. It was to provide a framework for making such rules that the Pico Peering Agreement[36] was developed.

[36] http://picopeer.net/PPA-en.html

In the long term, networks motivated by a collective need for a space of free, self-determined communication may become necessary in order to protect freedom of speech and freedom of the media on the Internet. Besides the GPL and the GNU Documentation Licence, other copyleft licences have now been developed to protect the distribution of not only programmes but also individual units of content – images, texts, pieces of music[37]. A growing number of authors now use such licences to allow public use of their creative output. To secure this freedom in the long term, there is also a need for free or self-determined network infrastructures. According to Eben Moglen, interrelations between Open Source, Open Hardware and Free Networks are the main guarantors of this freedom, of its survival and its extension[38] – an insight that is becoming increasingly significant.

[37] see especially the Creative Commons licences: www.creativecommons.org

[38] From a lecture given at the Open Cultures Conference, Vienna (2003). See http://opencultures.t0.or.at

PICO PEERING

In 2002, a small group of networkers began to develop a framework agreement designed to lay down basic conventions for data exchange in Free Networks – the Pico Peering Agreement (PPA). The prefix 'pico' was added to the term peering because the agreement in question concerns free data transfer between very small network cells. Consideration was given to what, exactly, constitutes the core of this resource, the Free Network, and the conclusion was that it involves the readiness to allow others free data transit: you can cross my 'virtual plot of land' and in return I can cross yours. The PPA regulates the basic principles of free data transit and implicitly describes the nature of 'freedom' in Free Networks (as distinct from sponsored charge-free networks). Like the GPL for Free Software, the PPA for Free Networks is meant to provide a kind of seal of uncompromising quality. The PPA is the first step towards a constitution for the Network Commons, a declaration of fundamental rights and duties.

OPEN SPECTRUM

In the United States, a lobby has gathered under the banner of Open Spectrum to demand the deregulation of the entire spectrum. Technical progress in the field of frequency-spreading techniques and 'cognitive' wireless technologies, it is claimed, make frequency regulation as we know it obsolete and allow spectrum regulation to be left to the devices involved. Now, Open Spectrum initiatives in Europe are also trying to gain influence within the regulation debate in order to put additional wavebands at the disposal of the Network Commons.

MESH NETWORKS

Technical developments have focussed above all on dynamic routing protocols for mobile ad-hoc networks. A meshed network is based on the assumption that new wireless network nodes can be added while others temporarily or permanently go out of service. The routers in a mesh network should automatically register new nodes deal with nodes going out of service. To achieve this, dynamic routing protocols must be employed. Like so many things, these were initially developed within the framework of R&D programs financed by the U.S. military[39]. Today, MANET (Mobile Ad-hoc Networks) is an official working group of the IETF. But it should not be overlooked that amateur radio enthusiasts have also been working for a long time on wireless protocols – so-called Packet Radio – where the same problems arise.

The London company Locustworld[40] developed integrated hardware-software solutions, the MeshBook and the MeshBox; 4G-Systems from Hamburg[41] developed the MeshCube – products inspired by the early discussions in the context of Consume and Freifunk. The combined hardware-software solutions were informed by the idea of distributing a standard configuration for a mesh network node as a bootable Linux distribution, the idea being to allow those without in-depth knowledge of network administration to get involved and to set up and operate nodes[42]. In this respect, the Free Network scene made a major contribution to the implementation and alpha-testing of mesh protocols like OLSR[43], thus aiding academic research, at least indirectly.

DIGITAL CARTOGRAPHY

Another area of technical development is the entire field of digital cartography and related open mapping approaches, such as the Consume NodeDB. In this case, data supplied by the operators of network nodes is used to automatically

[39] See http://cs.itd.nrl.navy.mil/work/mas/index.php and www.mitre.org/work/tech_transfer/mobilemesh

[40] http://locustworld.com

[41] www.4g-systems.de

[42] Free Unix distributions with special network functionality have been worked on by a number of Free Network initiatives, including SeattleWireless and NYCWireless. Freifunk firmware also exists.

[43] www.olsr.org

generate a map, which can be used to locate nodes in the meshed network that might be willing to link up. According to the original concept, the NodeDB was to contain information necessary to establish connections on the technical level, such as the IP addresses of the main services being provided. The Consume NodeDB is stable and enables hotspots to be located with relative precision on the basis of postcodes. But the precision of the geographical data comes at a price, since it is obtained from the Ordnance Survey, the British state agency for mapmaking whose maps are not in the public domain. Where official maps are protected by copyright, there is always the option of making one's own – inspired by practices such as war-driving and geocaching[44].

[44] Geocaching is a new kind of outdoor treasure-hunting game. Players use GPS devices to try to locate hidden containers that hold trinkets or messages.

In 2002, in the *air shadow* project[45], vortex suggested that the leisure activities of war-driving and war-walking could be used for more systematic mapmaking. The information broadcast by the wireless nodes would be registered, saved and visualized on maps. If one drives or walks a specific area, covering all the ground more or less systematically, then the data gathered can be used to establish the actual range of the wireless signal from a particular access point. Vortex called this range the 'air shadow'. If concrete, up-to-date information about the broadcasting range of wireless networks were to be collected by large numbers of people, it would be possible to create useful maps, overlaying data about open wireless networks with information about what they offer.

[45] www.free2air.org/section/airshadow

Developments of this approach are currently being pursued under the names 'bottom-up mapping' and 'open mapping', in connection with ideas concerning decentralized database resources (the semantic web). If every network node also had a machine-readable description, then it would be possible to generate a map that would also show services and resources, such as live streams. This development work is taking place within the context of an open geodata approach, focussing on attempts to generate a London Free Map[46] modelled on the Mumbai Free Map[47]. These endeavours are situated within the context of new cultural and narrative formats collectively referred to as 'locative media'.

[46] http://uo.space.frot.org/freemap

[47] http://freemap.in

Concluding Remarks

The demands of the Consume Manifesto have never been fully implemented, at least not in London, and not to the extent of

realizing an extensive mesh network. Nonetheless, the basic concept did take off and has undergone further development in many different directions. Technical development and testing have been carried out in the field of dynamic routing protocols and free hardware/software solutions. These approaches show how alternative objectives can provide the inspiration for technical innovation. But the Free Networks also brought forth a kind of social protocol, the Pico Peering Agreement. This process fed further debate concerning self-regulation and openness in social systems. Experience with wireless networks also gave grounds to the hope that ad-hoc networks could be operated with mobile devices such as cellphones. Transferring this idea to the social field, one can imagine a society in ad-hoc mode[48]. The Free Network idea has also made an impact on neighbouring fields, such as work on open mapping or bottom-up cartography[49]. The convergence of socio-politically motivated groups, artistic intentions, and DIY media provide valuable impulses for alternative use and an alternative understanding of technology. The focus here, then, is on technologies as techno-social artefacts whose development is not top-down, but driven by grassroots processes. Economies based on gift and barter dissolve logics that have been in force for centuries: in the hands of alternative groups, they become disruptive technologies that bear within them the seed of a paradigm shift in how we understand the interplay of technology and society.

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[48] Medosch 'Die Gesellschaft im Ad-hoc-Modus' in C. Bieber and C. Leggewie (2004). Online in English: http://data-browser.net/01/DB01/Medosch.pdf

[49] See University of Openness. http://uo.twenteenthcentury.com/index.php/Main_Page

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SIDELONG GLANCES

Mukul Patel
2007

1. A future too late

At Bill McAlister's house, entering the kitchen: a moment at the gateway is marked by the Greenwich Time Signal. Synchronised to an atomic clock at the National Physical Laboratory, the pips reach me from the past: an analog radio in the bedroom. Ahead, a digital receiver by the stove repeats the signal, delayed a couple of seconds by the encoding-decoding process.

In the future, we will wonder: must we not all have been here before?

Mukul Patel
2002

ON AIR

ambientTV.NET has collaborated on several works with Austrian independent radio station FRO 105.0 FM in Linz, including *On Air*, a project with young '2nd generation' musicians streamed from London for broadcast in Linz, and *Suvara*[1].

Suvara arose out of impromptu recording sessions with traditional Afghani group Rafi Hanif & Party at Radio FRO in 2002. At a presentation by participants of a DJ/VJ workshop that I ran with Manu at Radio FRO, one DJ asked to be accompanied by his brother, a percussionist. The brother (Rafi Hanif) arrived, together with 11 other family members ranging in age from five to 75. The party then proceeded to fill the basement of Radio FRO's headquarters in Stadtwerkstat with song and dance, refusing to leave without recording a session.

[1] Literally, 'horseback rider': a song genre from Khorezm expressing spiritual and lyric poetry.



Suvara *LP cover*

The wild evening that followed suggested that a dialogue between the traditional musicians, recently displaced from Afghanistan, and the younger generation working with electronic instruments would be rewarding. Radio FRO made the recorded sessions available for download and reinterpretation, while I ran workshops in music production at Stadtwerkstat. Workshop attendees submitted their reinterpretations, which were compiled together with contributions from established artists (such as Asian Dub Foundation) onto a CD and double LP.

ZINOVY ZINIK RAISES A QUESTION ABOUT WIRELESS COMMUNITY INITIATIVES

Zinovy Zinik *et al*
2002

ZZ – [...I]t's become fashionable, especially in Manhattan, to oppose these corporal structures of the Internet etc. etc., but you create a certain collective, a certain community. Isn't the danger, talking about the future of that type of project, that somebody would start running it? Exactly because people know each other, and they become a new commune, is there a danger of it being taken over by some evil person?

MP – It's already happened.

ZZ – You see? Could you elaborate?

MP – We just don't know who that is.

ZZ – Could you elaborate?

ML – [...A]ll those who were in charge of a node in this network entered their data in a database. [...The] same kind of database operates in many cities. [...] A company based in the States was actually using all this data about access points as a commercial asset, [selling information on] free access in Europe.

TM – So how do you safeguard against the same old structure just repeating itself three years down the line?

AA – Your being hacked by the corporation...

TM – Your being hacked by the corporation, yes...

ML – We just keep moving on. [...]

Transcript excerpt from the INTERNATIONAL NECRONAUTICAL SOCIETY (INS) Second First Committee Hearings: Transmission, Death, Technology.

First Committee Delegation: Tom McCarthy (General Secretary), Anthony Auerbach (Chief of Propaganda), Zinovy Zinik (Extra-mural Assessor) Witnesses: Heath Bunting, John Cussans, Ken Hollings, Cerith Wyn Evans, Jane Lewty, Manu Luksch, Mukul Patel

ZZ = Zinovy Zinik
MP = Mukul Patel
ML = Manu Luksch
TM = Tom McCarthy
AA = Anthony Auerbach

Members of the INS cross-examined experts in the field of sound/broadcast art. The hearings took place on Saturday 16 November 2002 at CUBITT, 8 Angel Mews, London.

www.necronauts.org
www.cubittartists.org.uk

4/DISTURBING SLOWNESS IN SPEEDY TIMES

4/DISTURBING SLOWNESS IN SPEEDY TIMES





Manu Luksch
1996/2008

35 mm transparencies

DIAMONDS & CLOVERLEAVES

During a visit to Beijing in 1996, I captured images of newly built, empty road intersections. Between 1966 and 1996, more than 160 intersections were built in Beijing, some over 500 m long and covering areas of 250,000 m^2. This grandiose construction project necessitated the demolition of many hutongs and the mass resettlement of their inhabitants. Over the past decade, the city's highways and intersections have become clogged with private cars that are major contributors to its pollution problem.



Manu Luksch
2004

Call for works, *Video as urban condition*

www.video-as.org



URBAN ROAD MOVIES

February 2003: the Congestion Charge is introduced in London. The fee applies to all vehicles entering the central zone. Compliance is ensured by a surveillance apparatus that records vehicle registration plates. Vehicles are monitored throughout the charging zone. In mediaeval times, city walls signified to those entering them that they were approaching the centre of political, economic, and religious power. Today's guardians, closed-circuit TV cameras that peer down from posts on every street corner, ensure that modern citizens are no less aware of this fact.

In 1995, at the *Telepolis* symposium in Luxembourg, an attempt was made to redefine urbanism for an emerging digital age, in which trade, communication, and information exchange would be increasingly carried out by means of e-commerce, video conferencing, and chat- and newsgroups. Today, media convergence is a reality, but the predicted decline in the physical movement of people has not occurred. The increase in traffic is not just across national boundaries, but also across the economically more significant city borders. Former inhabitants leave older European and American city centres, now turned into lifeless zones of speculation. The influx of people into newer urban centres in Asia and South America is creating mega-cities. The European city plan is mediaeval, its nodes of activity are crossroads. The new Asian media cities (attached to Dubai, Seoul, Kuala Lumpur) are growing around an infrastructure of data highways, and their nodes of activity are the access points to these highways. To what extent can electronic media impose or create an urbanism? What kind of urbanism will this be? could this be? Or, will the urban appear only in the interstices, despite the planners' best intentions?

Media convergence and the diffusion of digital technology, coupled with increasing anxiety and paranoia in the city, has greatly expanded the realm of video. The telephone conversation, the journal entry, the eyewitness account, the infant's room – all are enhanced, supported, substantiated, monitored, or otherwise qualified by the use of 'moving' image. Video is most prevalent not in any 'pure' form, but in such hybrid manifestations.



This symposium and exhibition will examine the extents to which mediation forms our urban experience, and urban experience influences video culture. We invite works that throw light on the place of video in the city, and of the city in video. Works that situate urban experience around networks of traffic (human, vehicular, or data), or that examine the relationship of newer, developing cities to media, would be of particular interest.

Video as urban condition

Anthony Auerbach

Video as urban condition examines a medium whose most distinctive characteristics are multiplicity and diversity, a form which is not contained by the norms of art institutions or the exclusive domains of professionals. Video is a medium of mass production — that is, mass participation — as well as of mass consumption.

The project was launched in 2004 with an interdisciplinary symposium which took place at the Austrian Cultural Forum, London, with: Juha Huuskonen (Katastro.fi), Manu Luksch (ambientTV.NET), Anna McCarthy (New York University), Paul O'Connor (Undercurrents News Network), and Ole Scheeren (Office of Metropolitan Architecture), and chaired by Anthony Auerbach.

Project statement, *Video as urban condition*. The project is ongoing; in 2006–07, it toured to Paço das Artes, São Paolo, the Armenian Center for Contemporary Experimental Art, Yerevan, and the Lentos Museum of Modern Art, Linz.

Manu Luksch
2006

Statement on *Broadbandit Highway* for *VBI: the ambient.lounge* at Witte de With, during the 35th International Film Festival Rotterdam

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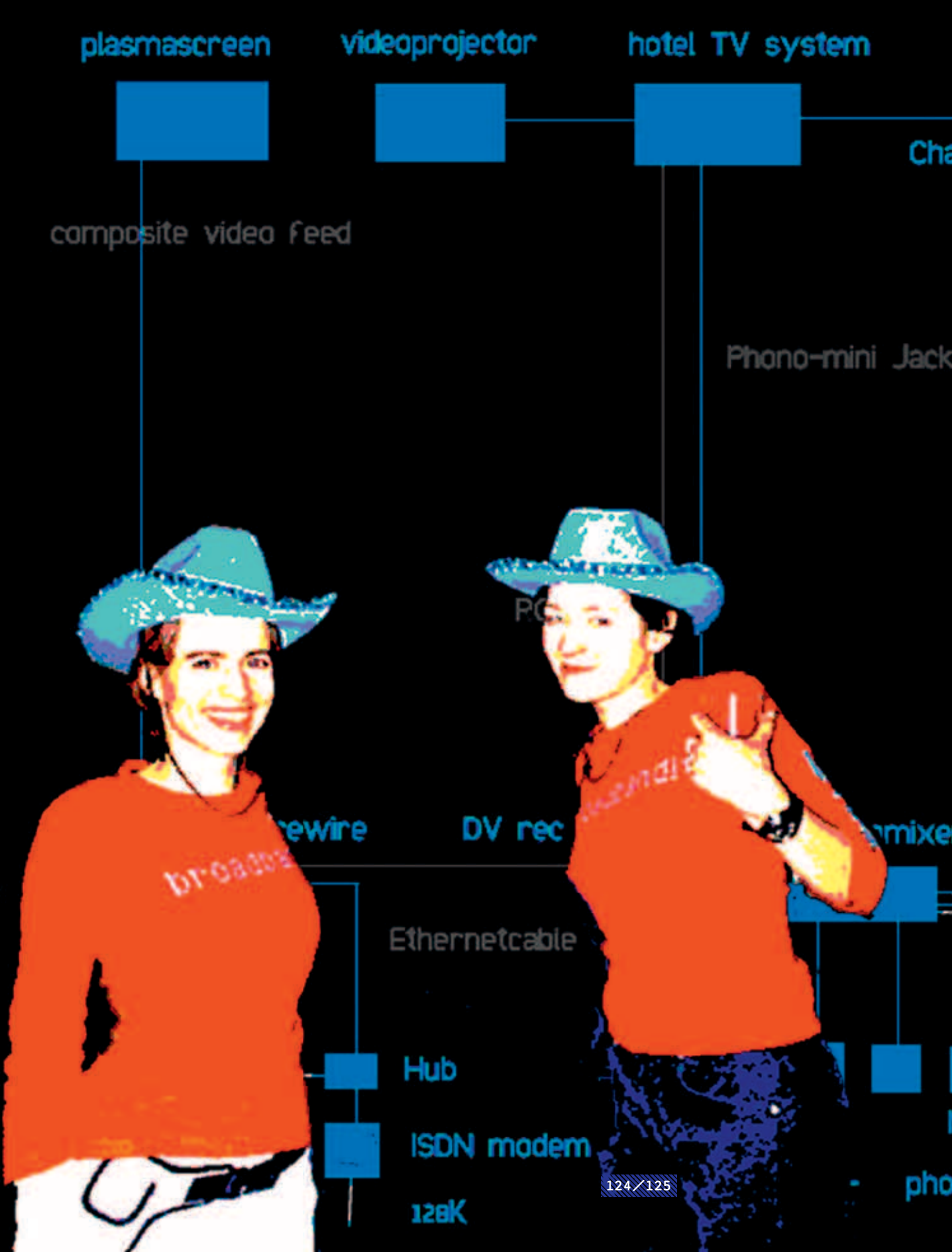
BROADBANDITRY

Six years ago, ambientTV.NET was invited to participate in *Please Disturb Me*, a show at the Great Eastern Hotel in London (24 March–8 April 2001). Each artist was offered a space of their choice. We (Ilze Black and myself) decided to inhabit the media-space of the hotel's cable TV system rather than a room: we wanted to make 'ambient television'.

It was around this time that webcams and streaming video had become practical and popular on the Internet. I was very enthusiastic about this development: I thought that it could have a positive effect on TV programmes if expensive airtime was undermined by do-it-yourself television. After all, anyone could run a little broadcasting (or narrowcasting) station from their kitchen table by using the Internet.

I researched how people were using webcams and discovered an uninspiring reality: the most widespread use was pornography, followed by weather cams (to help office workers decide about surfing or skiing on the week-end), and thirdly, traffic surveillance cameras. The traffic cams were operated by city administrations, universities, freeway departments, tourism offices, and even individuals who simply stuck a cam out of the window overlooking the local street crossing.

Our idea was to use these traffic cam streams to make a road movie – an endless, self-generating road movie. We took on the roles of 'bandits' of the Information Superhighway by implementing JavaScript code that chose a new cam source every 40 seconds from an array of about 100, hijacked the video stream, and resized it into full-screen format. We diverted the video onto the hotel television network, where it ran 24/7 on *Channel 26*. The soundtrack was created live by Supermodem (Kate Rich and Sneha Solanki) during the opening of the show. The result was *Broadbandit Highway*, a film that eventually became five years long, ending only when the last of the traffic cams we tapped went offline in March 2006.


plasmascreen
videoprojector
hotel TV system
Cha
composite video feed
Phono-mini Jack
DV rec
Ethernetcable
Hub
ISDN modem
128K
124/125



1


22 Mar 01 20:40:32
Thibault-EB24@Caldecott 21 Mar 18:37:14
2001/03/23 19:34:29

2

MEANWHILE, OVER ON *CHANNEL 26...*

Franko B: *I miss you*
[13 min, UK 1999]

Shu Lea Cheang: *I.K.U.*
[3 min, UK/Japan 2000]

F5: *Bloody TV*
[3 min, Latvia 2000]

Bureau of Inverse Technology: *BIT Plane*
[15 min, UK/USA 1999]

Andree Korpys & Markus Löffler: *3 US buildings*
[15 min, Germany 1997]

Chapman Brothers: *Bring Me the Head Of*
[10 min, UK 2000]

Derek Ogbourne: *Gutter*
[3 min, UK 2000]

Motoko Ohinata: *Rabbit People*
[6 min, UK 1999]

Richard Wright: *LMX Spiral*
[8 min, UK 1998]

Ilze Black & Manu Luksch
2001

Channel 26 was a programme of contemporary video art curated for an internal TV channel of the Great Eastern Hotel, London, as part of the *Please Disturb Me* show.

1
Broadbandit Highway *in the* ambient.lounge *at* Connecting Worlds, *NTT ICC (InterCommunication Center), Tokyo, 2006*
Photo: KIOKU Keizo

2
Broadbandit Highway *(Manu Luksch & Ilze Black)*

3
BIT Plane *(Bureau of Inverse Technology)*

4
I.K.U. *(Shu Lea Cheang)*

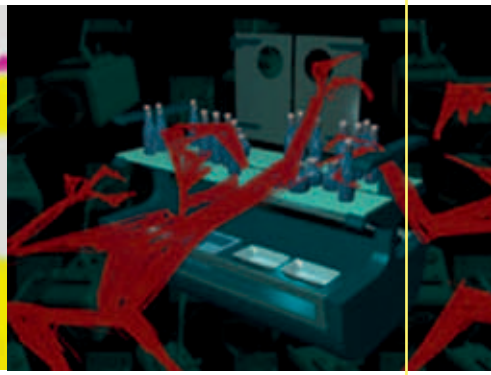
5
LMX Spiral *(Richard Wright)*



3



4



5

Mukul Patel
2002

Official report on *2002 Arabian Nights*, the New Year's Eve tent-warming at ambient.space

Photography by **Chris Helgren**



Once upon a time
Fair Cleopatra of Slackney
the Black Queen of Balsam Green
Khalifa Khera (head of the harem)
pipe/line layer Badmash Basmachi
and Plastic Smoking Camel Jockey
played host to a multitude of mullahs
imams and cantors
calligraphers of light
mosaic artists of the night
chess players and tea drinkers
OPEC sheikhs
Ukranian rebels
a Transoxianian Emir
pursued by shooting Tsars
a band of Tuareg
a worshipper of Ra
and Olive Ra herself (princess-in-waiting)
Parsi percussionists
Afghani viola players
hashishin and harafish
a Goth and a camel
five Yasser Arafats









Mr. & Mrs. Leila Khaled
and all kinds of lesser terrorists
who Rocked the Casbah for 14 hours
and Painted it green and white
and red
and Black

Turbans were worn
and torn off
eyes gazed at
and averted
games won and lost
incense inhaled
and senses inflamed
sweet wine imbibed with sweetmeats
a dervish whirled desert discs
and a story was whispered
that began:

"Once upon a time
Fair Cleopatra of Slackney
the Black Queen of Balsam Green
Khalifa Khera...

"CNN–ESPN–ABC–TNT but mostly B.S.
where oxymoronic language like
'virtually spotless'
'fresh frozen'
'light yet filling' and
'military intelligence'
have become standard

"T.V. is the place
where phrases are redefined
like 'recession' to 'necessary downturn'
'crude oil on a beach' to 'mousse'
'civilian death' to 'collateral damages'
and being killed by your own army
is now called 'friendly fire' "

The Disposable Heroes
of Hiphoprisy, 'Television,
the Drug of the Nation'
(4th & B'way, 1991)
Lyrics: Michael Franti

OUR MAN IN BAGHDAD

[Redacted]
2002–04

ambientTV.NET's roving optoelectronic eye was based in the Middle East in the build-up to and during the early part of the current war in Iraq. He shared his second thoughts on the situation via a web log.

Ramadan in Kuwait, November 2, 2002

Merhaba from Kuwait.

It's a dry country here (no booze) and due to get even drier: Ramadan starts Nov 6. So, beginning next Wednesday, I'm gonna have to learn how to smoke without anyone knowing it, sneak a drink of water or hide a bite to eat during daylight hours. Maybe I'll return looking like Twiggy. If I'm not dead from thirst. This place has beautiful mosques at every corner, paid for in part by the cash certain multi-national corporations give the country. Boys race the streets in Maseratis chasing girls driving Mercedes, eventually they catch each other and go off to park. Apparently though, they are not as rich as they look ... my friend says most of the youth are in perpetual debt, leasing a hot car, then selling it for cash so they can live it up in places like New York and London (you can't get personal loans from the banks but they will happily finance a car). Then they spend five years paying it off. All because their other friends do it, and there's no sense being left out, is there?

There is also a darker side ... Sri Lankans arrive here with promises of $200 a month as security guards, then the security companies get them to sign a contract for $100 and if they don't like it they can go home. Which they can't, because they've already taken a loan to come here in the first place. Also, bus services that run intermittently, so the story goes, in order that employers can squeeze an extra four hours out of the workers, who eventually go home to sleep in a squat with 14 others. And horrific tales of rape – on Filipino maids by employers, or the uncle, father and brother abusing the girl in the family. Apparently it's quite common. And as far as alcohol goes, guess who runs the illegal cartel?

But there are nice things too. I went to cover a story today about old shipwrights who used to be the toast of society, and now after the oil boom they just make wooden models of the once grand dhows which plied the seas. Bahrain was a good story in that women were allowed to both vote and run as candidates for national office, for the first time. And I got to hang out of a helicopter, my favourite mode of transport, for



the first time since Bosnia, while covering speedboat races. The sunsets are stunning, the food always fresh, and fishermen bring back some of the best prawns to be found anywhere.

Tomorrow we are off to shoot pix of falcon hunters kicked out of their desert grounds due to upcoming 'war games' where one-third of the country is to be out of bounds. Right in the midst of camping season, a Kuwaiti tradition.

Birthdays on the road, Kuwait, November 2002

We celebrated my birthday with a nice curry and played pool at a Filipino karaoke bar. At first, no alcohol, since this is a dry Islamic country, and we got banned from the British embassy pub, but then a friend of mine provided some ethanol (actually Kodak computer screen cleaning fluid) and we mixed it with lemonade. The plastic bottle it came in had been sitting on a shelf for a year, so at least it was aged. My friends here gave me a portable shisha kit in a padded briefcase. And the hotel head chef brought me a birthday cake for breakfast ... then another one came to my room in the afternoon.

Embedding with the U.S. Army, December 18, 2002

I was shooting the opening match of the Arab Cup soccer tournament here in Kuwait City and got the Moroccan fans to chant 'Vive le Canada, vive le Canada'!



Kuwait is getting a bit chilly, down to 16°C in the evening and dropping out in the desert to 9°C at night. So I guess tomorrow will be a shopping day for a winter coat as I'm going out on another four-day junket with the Yank army. Last week I was with a company of Abrams tanks and we got stuck in the sand three times (I think due to a Brit driver who we won't name), and got pulled out by a monster of a tank that all of a sudden loomed in my night vision goggles. Later, we returned the favour when we got lost with another tank in some massive sand dunes and I found us a route back to base using a bit of common sense rather than satellite tracking devices. And the next night, we were being escorted by a sergeant with 18 years experience who started freaking out when his GPS broke. I calmly pointed to the Big Dipper and taught him how to find North. Then I suggested we drive to a place with lights a couple of kilometres away, which we did and it turned out to be

an engineering base where we found help. I guess the learning curve is so great when teaching them how to push a button on a tank's computer that they miss the basic stuff that I learned in boy scouts. Please bring on the British Army, who would know how to use a hammer to fix a tank rather than calling in an MIT graduate – and even how to find Kuwait on a map.

Christmas is coming up and I expect I'll be dining with the troops on the same turkey that we had at Thanksgiving – meat pressed from several different birds/species, washed down with a lovely 1998 'Cabaret' (sic) nonalcoholic wine/grape juice variant.





The march to war, Kuwait, January 2003

Another year gone by, and the march to war continues. The Kuwaitis are used to this monotony by now – every three years or so there is some sort of 'crisis' where certain members of the world press announce that we are 'on the brink of war', with tanks massing on the borders etc. If you read the *Sunday Times* any given week you'd think the Yanks were to invade Oct 30, Nov 6, Nov 30, Dec 7, Dec 16, and so on.

In reality there are enough US troops in Kuwait to police a Rolling Stones concert, that's about it. But yes, there is a big deployment underway, though it's gonna be a lot longer than anyone thinks before they are up to battle strength. In the meantime, the circus is forming. The media circus, I mean. One network has just booked the entire Ritz Carlton hotel, and I overheard an executive say that if there isn't a war, they bloody well hope they can make one, as the costs will start to spiral. Think I read the same thing about newspaper magnate William Randolph Hearst before the Spanish American War. Next week we expect a huge influx of American wannabe Pulitzer candidates, just like in all the other wars... By the way, Joseph Pulitzer was just as guilty of sensationalising the war in 1895.



The U.S. Army and Marines have been attempting their own version of Spin Doctoring. Seems they don't want to go 'off message' from the White House saying they're hoping for a peaceful settlement, while pictures and video show up of troops firing rockets during exercises. So when we visit American bases, questions on Iraq are banned and reporters are shadowed by minders. Even the word 'censorship' seems to be banned. Personally I think they are testing us to see who will

bend over for them, who will or won't report on a fuckup if it happens. Soundbite from a U.S. trooper next to a huge desert bonfire on New Year's Eve: 'See that? That's what Baghdad's gonna look like.'

Northern Kuwait, March 20, 2003

My view on the invasion of Iraq is from a farm's water tower just a kilometre or so from the frontier. It's different than the 'shock and awe' in Baghdad that everyone else was watching on TV. Mostly, it's the flash and thud of artillery landing, arcing of rockets, and drone of fleets of helicopters traversing the front lines. We go in tomorrow.

Umm Al Qasr, Iraq, late March 2003

Oh my lord, I shouldn't have done that. You cannot imagine what it's like to sleep on open ground for three weeks in the desert, bathing with bottled water, using a filthy petrol station toilet in a war zone, and cooking tins of beans with mango pickle chutney to flavour them. It's a hot, horrible, poverty-stricken place with children who look like they've never seen a bar of soap, and convoys of tractors laden with tasteless tomatoes criss-crossing the roads in search of non-existent customers after the electricity lines were bombed, crippling the canning factories.





Anyway, this is the background to the day the power came back to Umm al Qasr, which lies just across the border from Kuwait. Everyone was taken by surprise, and all the locals rushed back to their homes to start filling refrigerators at long last. And some enterprising souls found large freezers in which they stuffed bottles of Iraqi Pepsi. The first problem was, these freezers had been full of rotting fish since the electricity went off. Second problem was, I didn't smell the fish, nor did I want to, as I guzzled three bottles of the gorgeous cold liquid in 45 degree heat. To make a long story short I got so sick that I was taken back to Kuwait City to lie on a hotel bed for three days.

Baghdad, April 17, 2003

A week after I arrived. Things are settling down now, if that's a word for it. At least no masses in the emergency wards due to

nervous American troops shooting and blowing up anything they deem suspicious. That includes us journalists...both Reuters and Al Jazeera lost cameramen (plus several others suffering injury) to a tank crew who didn't realise that the Palestine Hotel was full of press and not snipers. Even though it has been the main press hotel for months. That knowledge also didn't stop the U.S. Air Force from heroically giving freedom to the Iraqi people by dropping a 2,000 lb JDAM bomb across the street last month. Friends embedded with the U.S. Marines warned that those guys shoot first and ask questions later, claiming scores of innocent lives in their wake. Even our armoured Land Rover, Brenda the Defender, didn't escape their notice as twice now Army soldiers and Marines have fired their M-16s in the air when we slowed to cross a checkpoint. Brenda has TV stickers all over her as well as bright orange markings, but I guess Army opticians aren't so good.



The final leg of the trip into the capital was the scariest drive I've ever done – three hours on a deserted, no-man's land highway on which we had to manoeuvre through chicanes of destroyed Iraqi armoured personnel carriers. The three of us in the armoured car, which would not have withstood much more than a burst from a Kalashnikov, were chain-smoking over an ashtray overflowing onto the carpet.

When I first arrived at the top of Highway 8 en route to Baghdad's Saddam International Airport, I was horrified. We were met by shell-shocked embedded journalists and the sight of charred bodies still entombed in gutted cars, with spent shell casings carpeting the road. Smoke rose from every vista, and the pall of death made its way through Brenda's air conditioning. The road to the airport told a story of mayhem – trees split by shellfire, full size cars turned into compact ones under the wheels of Abrams tanks, bodies lying helter-skelter in the woodlands alongside the boulevard. I was thankful I wasn't around to see the place when it had been a battleground.

Then there were a few days of chaos...looting, shooting and sniping amid the thump of artillery shells landing. Relatives looking for lost prisoners crowded the former secret police bases, shouting down wells in the unfounded hope their loved ones were still alive in what they claim are underground dungeons. We visited a Muhabarat jail and saw eerie pictures of a family drawn on cement walls without light, and in other cells the days of the Muslim fasting month of Ramadan were scratched. It must have been hell living through solitary confinement in that place.







Now, after the looting, the shopping spree begins and one can pick up bargains on street corners staffed by 'Ali Babas', what the locals call thieves. The best buy seen today was diesel powered electricity generators. The local police are now patrolling the streets with the U.S. Marines, to some effect.

Yesterday we came across the aftermath of a bank robbery... three suspects lying on the ground, receiving the odd kick or whack from a cop (20 more got away). All of a sudden there was some commotion and about 15 Ali Babas were fighting amongst themselves for a loose bag of Iraqi dinars abandoned by the robbers. One policeman took it upon himself to chase down the new group of blighters, armed with only his truncheon. A few moments later he was bounding at full speed past me, minus his baton, with some thieves in pursuit throwing bricks. Then they stole his Toyota Landcruiser, fishtailing out of sight. I told a Marine what had happened and he replied, 'Oh great, not only do they have a getaway car, we don't even have the means to transport the suspects we did arrest!'

It's now been over six months since I arrived in the Gulf to help organise our presence here. In that time I've choked in sandstorms, gotten food poisoning and a chest infection, slept in the desert for weeks on end, and been regarded as scum (as an independent journalist) by the British and American press officers. If I had been embedded into an army unit I would have been given more respect, but even worse living conditions – go figure. We were first into Basra, greeted by a mortar attack, and first to have linked up teams from north and south Iraq in Tikrit – Saddam's birthplace and site of the last battle of the war. Very fitting as the guy I linked up with in the driveway of Saddam's palace was no less an icon than [redacted], my old partner and great friend from [redacted]. I wouldn't trade the experience but it's time to take a break, and I have been promised one in about 10 days.

Baghdad, August 7, 2003

The city has no water, power, or gas and petrol is in such a short supply that motorists are forced to queue for hours. Tempers flare and there is a growing insurgency. Arson blazes break out amid a lack of firemen. Riots over unpaid salaries turn deadly. The answer to the problem at hand is to throw in more security forces or... build more mosques?

It sounds like Iraq but actually is one of the main scenarios for the computer game *SimCity*, made by Electronic Arts of Redwood, California. While Bechtel seems to scoop up all the contracts, yet to be fulfilled due to insecurity, and American servicemen are under daily attack, nobody seems to have the answer to the problem. So why not consult EA? Many gamers seem able to build villages from scratch, turning them into a metropolis. Others watch as the cities they create implode, but then there is the restart button, and all turns out fine in the end.

If only one could pop a CD into a laptop drive and run a country, in a perfect world. But then again with all the talk about cyber warfare, maybe that's exactly what has happened at Central Command?







Manu Luksch & Mukul Patel
2002

The Net art work *Stealth Waltz* was commissioned for *KOP* (*Kingdom of Piracy*) at the Acer Digital Art Center (ADAC), Taiwan. A pilot site was launched in December 2001 at the Museum of Contemporary Art, Taipei. In April 2002, as Taiwan initiated a major anti-piracy drive, the leadership of ADAC changed. *KOP* became politically sensitive and the curators and artists were denied access to the *KOP* server at ADAC. By mid-June, the KOP site was taken offline, with ADAC demanding editorial rights and a change of exhibition title. The curatorial team rejected these demands and sought ways of preserving the project as both a Taiwanese initiative and an international online art project. Through the efforts of ADAC's former director Ray Wang, server access was restored. However, the use of the domain name was denied.

First public exhibition:
Ars Electronica, Linz 2002

(text adapted from the curators' statement by Shu Lea Cheang, Armin Medosch, and Yukiko Shikata, at http://kop.fact.co.uk)

STEALTH WALTZ

The Corporation's Announcement to Stakeholders: Heritage License Agreement

Following the highly successful appropriation of bio- and eco-knowledge and techniques through patent legislation, The Corporation today announces the extension of its reach to the regulation of folkloric production—in particular, music. Folklore encodes traditional wisdom that rightfully belongs to everyone. The current inheritors of these forms do not have the means to adequately preserve or share them. The Corporation, with the support of a consortium of publishing companies, will safeguard this global cultural heritage, develop efficient distribution mechanisms, and conduct an archaeology of the traditional wisdom encoded in folklore through the Heritage License Agreement (HLA). The HLA is effective immediately. Only instrumental electronic music in 2/2 time (binary beats) is exempt from the Heritage License, and may be distributed and consumed without reference to an agent of the HLA. The Corporation will be the exclusive licensing agent for traditional music production and distribution. As a valued stakeholder, you are assured of high rewards.

Ambient Information Systems' response

Ambient Information Systems, Ltd. responded to The Corporation's HLA by launching a server that stores ostensibly legal, HLA-free 2/2 music files. These files are, however, also containers for other files, hidden using steganographic techniques. The hidden file is designed so that when a user extracts it and combines it with the wrapper file, the result is a piece of non-2/2 time folk music. Thus, the server allows users to securely and covertly exchange folk music without the knowledge or interference of The Corporation.

IST: NEW CLOCKS FOR THE CITY OF LILLE

Mukul Patel
2006

The Indian subcontinent has accumulated a complex set of relationships to time. Hindu philosophy (and by extension, Jainism and Buddhism) marks time with a scale of units ranging from less than a millionth of a second (a *truti*, the time it takes for a needle to penetrate a lotus leaf), to over 300 trillion years (the life cycle of Brahma). Indians are also philosophical about time in a more quotidian sense – Indian Standard Time[1] is, so a long-standing joke goes, always a little late (though the trains tend to run on time). There also exist many other standards of timekeeping, more in proportion to human lives or habits, or bound into performance genres (music, dance).

IST is a suite of idiosyncratic public clocks – some precise, others vague; some highly regular, others not – that provide novel ways of marking life's passage. Some clocks are synchronized to UTC and others to the Sun, so they naturally meander in timekeeping relative to each other. Several of the clocks are programmed in the Max/MSP/Jitter environment.

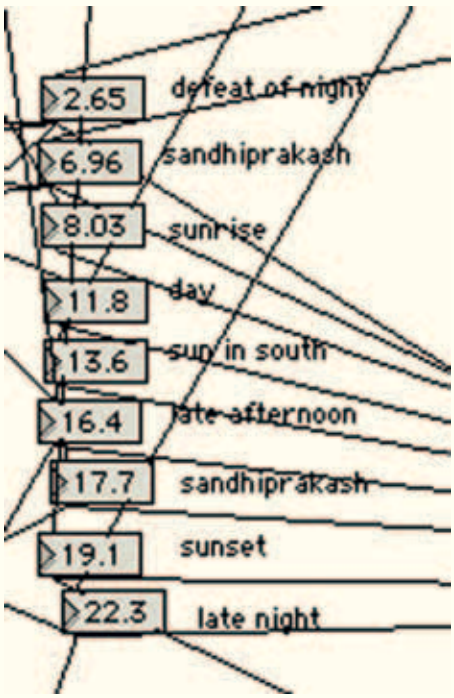
IST, a series of public sound, light and video installations, was commissioned by Lille3000.

[1] IST = UTC+5.30. Pakistan is UTC+5, Nepal UTC+5.45 (!), and Sri Lanka and Bangladesh UTC+6.

Raga

A tonal clock based on Indian melody, linked loosely to the seasonal position of the sun. The melodic material of classical Indian music is structured by raga – a very complex framework for improvisation, more than a scale but not yet a tune. In Hindustani music, a raga is associated with a season and time of day (as well as mood). For example, Lalit, a sandhi-prakash (twilight) raga usually heard in the morning, has both an augmented and natural fourth; Shree, another twilight raga associated with the evening, has an extremely flattened second degree; and Malkauns – deep in the night – is pentatonic.

This clock signals time by generating tonal material and light according to the position of the sun in the sky (found in a look-up table). The sound is a mixture of tanpura (drone) instruments tuned to different raga. Volume is modulated, peaking at times of transition – sunrise, sun in the south, sunset – and generally lower at night. Architectural lighting is used to flood the surroundings. Light intensity and colour are modulated in sync with the sound, most actively at times





Public address control system, Gare Lille Flandres

of transition. Conceived for the Jardin de l'Abbaye de Loos; installed in the rue des Débris St. Etienne.

Timetable

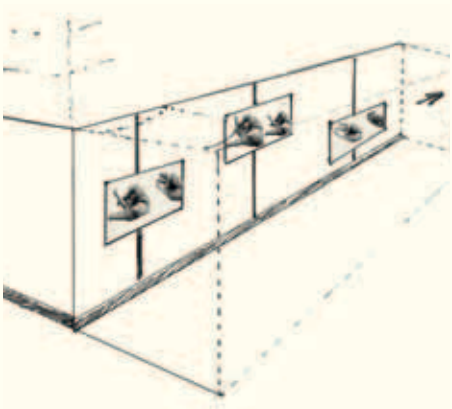
An audio clock that inhabits the public address system in Gare Lille Flandres, marking the time precisely but eccentrically by announcing the arrivals and departures of Indian trains, using recordings made in railway stations around India. Trains may be scheduled to depart at any number of minutes past the hour, so this clock 'chimes' in irregular intervals. The clock is in Indian time (so at 2350 CET it marks the departure of a train leaving Calcutta at 0350 IST). The Indian Railways timetable also varies with the days of the week, and this is reflected in the clock.

Tala

Digital video clock based on gestural counting systems of Indian music. Each 'digit' of the clock is a discrete video monitor that shows a hand in close-up. Three hands mark rhythmic cycles of 7, 12, and 16 beats, coinciding once every three days. Installed in the vitrine of boutique Série Noire.

The Birth of Fables

Designed for the Vielle Bourse (now a book market), this clock was not installed due to planning restrictions.



Sketch for Tala

Based on the Jataka Tales – moral fables of the Buddhist canon, dating back to 300 BCE, which are well known in France through adaptations by Jean de la Fontaine, the clock punctuates the activities in the book market with a fable for each day of the week. Recordings of versions of each fable are made in 15 major languages of the subcontinent, from Nepali to Tamil. Every 30 minutes, one of these recordings (c. 3 minutes long) is played back. Speakers are installed just inside each of the entrances to the Bourse. The volume is conversational. Excerpts from the written texts in different scripts are projected (bright white text) continuously on the floor of the shadowed entrances from ceiling-mounted slide projectors. A panel by each entrance includes the French text of the seven fables.



Manu Luksch & Mukul Patel
2008

The mixed-media installation *A New and Exciting Experience* was commissioned for 'THE NOT QUITE YET: On the Margins of Technology', a collaboration between Queen Mary University London and SPACE Media. Gallery show at SPACE Studios, Hackney, January–March 2008.



'THE NOT QUITE YET' began as a research project with a series of workshops with three community groups in East London, using techniques drawn from Lois Weaver's performance practice. The artists, who also included Lorraine Leeson and Stacy Makishi, explored the human–machine interface with focus on the experience of senior citizens.



A NEW AND EXCITING EXPERIENCE

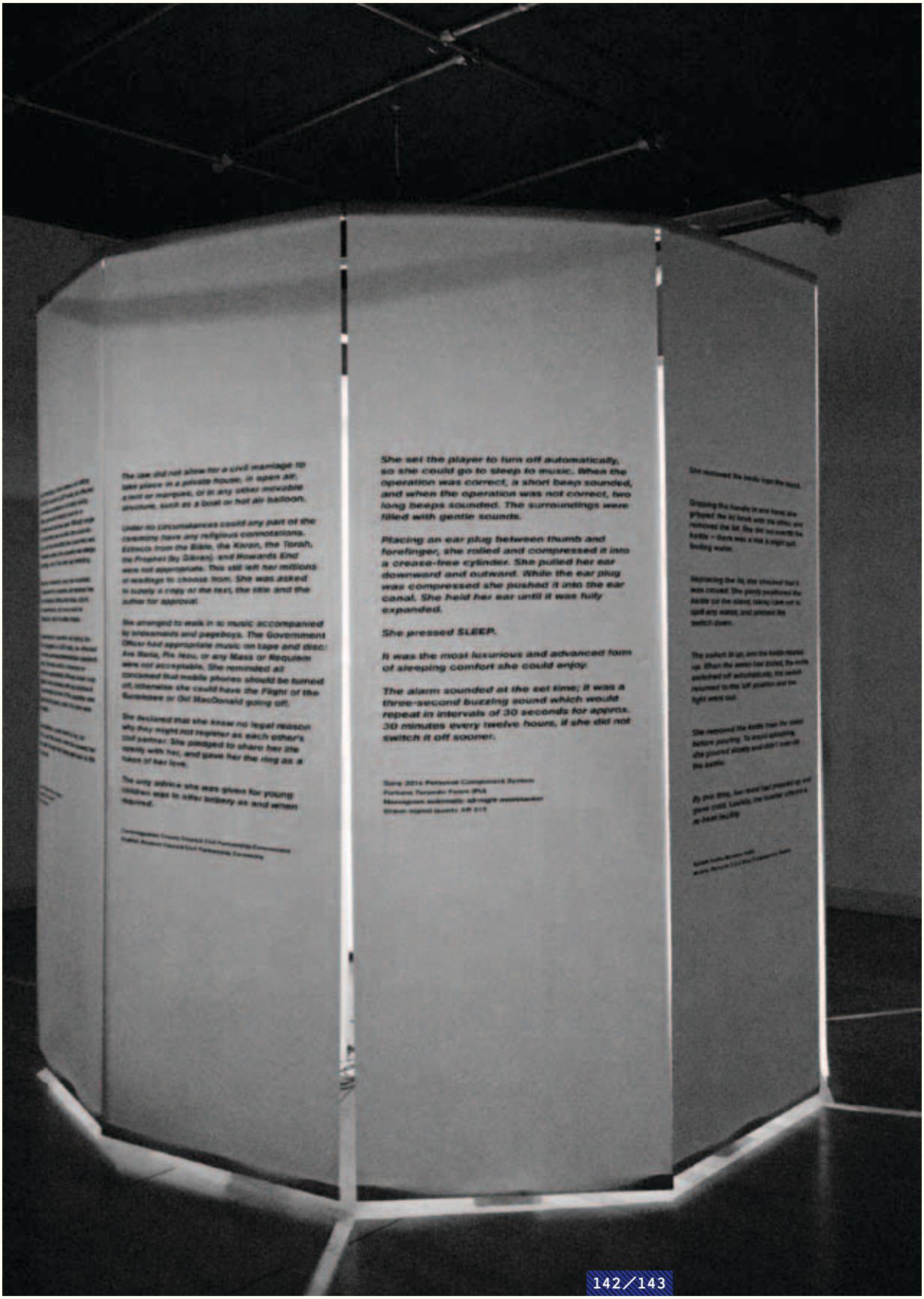
This is the story of a woman who does everything by the booklet. The booklet in question could be a user manual, warranty papers, terms and conditions, or any other relevant instructional or cautionary notice. For her own safety and that of those around her, the woman acts only on such explicit printed instructions.

There follow excerpts from the forthcoming volume of her electrifying adventures...

Security and safety are key contemporary concerns, inflamed by extravagant assessments of risk and an environment that is increasingly regulated and litigious. People relegate the calculus of danger to experts, pursue risk-averse behaviour, and surround themselves with products that limit exposure to novel experiences and cater to a culture of fear. *A New and Exciting Experience* addresses these perceptions and behaviours while poking fun at the technobabble and nannying tone of user manuals.

The work has a number of manifestations, including a sound and text installation, a book, and a film. For the exhibition at ambient.space in August 2008, the text of the woman's adventures was printed on large banners, hung by the objects she uses. Visitors were immersed in a surround-sound environment made in collaboration with the SPACE Age Sirens, a choir of senior women from London's East End led by Laka D. The choir set extracts from washing machine user manuals to popular melodies including '(How Much Is That) Doggie in the Window' and 'Rum and Coca Cola'.

The installation at NIMK (Nederlands Instituut voor Mediakunst), Amsterdam (November 2008–January 2009) took the form of a decagonal prism of 10 text banners and sound sources that formed a script for a day in the life of the woman.


She set the player to turn off automatically, so she could go to sleep to music. When the operation was correct, a short beep sounded, and when the operation was not correct, two long beeps sounded. The surroundings were filled with gentle sounds.
Placing an ear plug between thumb and forefinger, she rolled and compressed it into a crease-free cylinder. She pulled her ear downward and outward. While the ear plug was compressed she pushed it into the ear canal. She held her ear until it was fully expanded.
She pressed SLEEP.
It was the most luxurious and advanced form of sleeping comfort she could enjoy.
The alarm sounded at the set time; it was a three-second buzzing sound which would repeat in intervals of 30 seconds for approx. 30 minutes every twelve hours, if she did not switch it off sooner.

She thought that the power was off when the switch was off, but she was wrong.

Pressing the automatic curl release, she placed the curling iron midway up the hair section, then spread the hair evenly between spoon and barrel. Releasing the automatic curl release to hold the hair in place, she gently slid the curling iron down to the hair ends. She remembered to always place the spoon above the hair strand when making a curl she wanted rolled under, and under the hair strand when making a flip style.

To reduce the risk of electrocution, fire, or injury to persons, she never used it while sleeping or while drowsy. To avoid a burn hazard, she did not touch the hotplate (it was hot).

For a Straight Look, she pulled the straightener parallel to the section she had made at the scalp. For a Rounded Look, she positioned the straightener so that it rounded the hair under. With the salon-quality tool, she was able to style her hair from curly to sleek and straight in no time!

- *AC International AC8PROS Professional Straightener*
- *CONAIR Curling Iron CD101/AC8, CD103/AC8*

She removed the kettle from the stand.

Gripping the handle in one hand, she gripped the lid knob with the other, and removed the lid. She did not overfill the kettle – there was a risk it might spit boiling water.

Replacing the lid, she checked that it was closed. She gently positioned the kettle on the stand, taking care not to spill any water, and pressed the switch down.

The switch lit up, and the kettle heated up. When the water had boiled, the kettle switched off automatically, the switch returned to the 'off' position and the light went out.

She removed the kettle from the stand before pouring. To avoid splashing, she poured slowly and didn't over-tilt the kettle.

By this time, her toast had popped up and gone cold. Luckily, the toaster offered a reheat facility.

- *Russell Hobbs Montana Kettle*
- *Morphy Richards 2 & 4 Slice Contemporary Toaster*

She wasn't surprised when she heard the toilet flush in the middle of the night. A cat could learn how to do it.

To reduce the risk of burns, electrocution, fire or injury, she never used the toilet when she had consumed a great deal of alcohol or when she was extremely tired and might have fallen asleep. She did not use it while smoking.

The person detection sensor had trouble because of the colour of her clothing. The toilet lid didn't open automatically. She put cardboard under the lid and prayed. From then on, it was just a matter of time.

She sat squarely on the toilet. The wash alternated between a gentle and a forceful spray 70 times per second for a thorough rear wash while using less water.

She flushed the toilet using the remote control. The most difficult part was over. She moved away from the toilet and waited 90 seconds. At this point, she realized that she had won.

- *TOTO Washlet S400*
- *Charles Mingus CAT-alog for Toilet Training Your Cat*

To enter the BART system, she inserted her ticket into the fare gate. The ticket was returned to her, then the fare gate opened.

She was about to enjoy a new and exciting experience.

She turned the Control Knob on the Control Unit clockwise until the locomotive had reached the desired speed. A short circuit caused a derailment, which she corrected at once by lifting up the rolling stock that had contacted the live rail. She had some difficulty, so she sent them a postcard describing the trouble and they put her right immediately.

Later, she used the same ticket when she exited the station. The correct fare was automatically deducted from it. If the ticket had had too little value, a sign on the fare gate would have read Underpaid: Go to Addfare. A nearby Addfare vending machine would have told her how much additional fare to pay.

- *Bay Area Rapid Transit*
- *Hornby Digital Select Unit*
- *Hornby Dublo 12V Electric 4-6-2 'City of London'*
- *Hornby R.2349 GWR King Class King Henry VIII Loco*

She treated her camera as she would treat any valuable precision instrument.

To adjust the viewfinder eyepiece for her own eyesight, she looked through the viewfinder and turned the eyepiece adjustment ring until the image circle in the centre was sharp.

Before beginning the filming session, she established a general story line to follow. In this way, her movie would contain scenes that took place in a natural, logical order.

She aimed the camera so that an edge of the subject fell within the central focusing spot and turned the focusing ring until the two halves of the image coincided to form one continuous sharp image.

It was no exaggerration to say that the true enjoyment of shooting 8 mm movies lay in the technique of panning. The trouble was that when she actually released the shutter button, even an instant seemed very long. She tried to think up some appropriate sentence and timed it with a stopwatch. After she had decided on a particular sentence, she used it to time her sequences. The result, however, was dizzying footage which left her audience bored by repetitiveness.

- *Nikon R8 Super Zoom*
- *Ricoh Zoomlex*

She depalletized the bomb body and placed it on the appropriate bomb skid. Inspecting the bomb for stripped threads, cracks, or broken welds, she checked to see that the V-groove was clean and undamaged. She checked the electrical connectors to ensure they were not bent or corroded, and pressed gently on them with wooden dowel to ensure that they were firmly seated. While handling the weapon, she was particularly careful to avoid damaging the safety switch.

She employed only certified procedures, personnel, equipment, facilities, and organizations, authorized by the appropriate level of authority, to conduct nuclear weapon system operations. She did not intentionally expose nuclear weapons to abnormal environments, nor did she use them for training or troubleshooting.

She would not expend the nuclear weapons until she received a properly authenticated, valid nuclear control order conveying release or expenditure authority.

Deviations from safety rules were permitted in an emergency.

- *US Navy Aviation Ordnanceman*
- *Department of Defense General Nuclear Weapon System Safety Program Manual*

The law did not allow for a civil marriage to take place in a private house, in open air, a tent or marquee, or in any other movable structure, such as a boat or hot air balloon.

Under no circumstances could any part of the ceremony have religious connotations. Extracts from the Bible, the Koran, the Torah, the Prophet (by Gibran), and Howards End were not appropriate. This still left her millions of readings to choose from. She was asked to supply a copy of the text, the title and the author for approval.

She walked in to music accompanied by bridesmaids. The Government Officer had appropriate music on tape and disc: Ave Maria, Pie Jesu, or any Mass or Requiem were not acceptable. She had reminded all concerned that mobile phones should be turned off, otherwise she could have had the Flight of the Bumblebee or Old MacDonald going off.

She declared that she knew no legal reason why they might not register as civil partners. She pledged to share her life openly with her, and gave her the ring as a token of her love.

The only advice she had been given for young children was to offer bribery when required.

- Cambridgeshire County Council Civil Partnership
- Scottish Borders Council Civil Partnership Ceremony

She set the player to turn off automatically, so she could go to sleep to music. When the operation was correct, a short beep sounded, and when the operation was not correct, two long beeps sounded.

The surroundings were filled with gentle sounds.

Placing an ear plug between thumb and forefinger, she rolled and compressed it into a crease-free cylinder. She pulled her ear downward and outward. While the ear plug was compressed, she pushed it into the ear canal. She held her ear until it was fully expanded.

She pressed SLEEP.

It was the most luxurious and advanced form of sleeping comfort she could have enjoyed.

The alarm sounded at the set time; it was a three-second buzzing sound which would have repeated in intervals of 30 seconds for approximately 30 minutes every twelve hours, if she had not switched it off sooner.

- *Sony 301s Personal Component System*
- *Fortuna Torpedo Foam (PU)*
- *Monogram automatic all-night overblanket*
- *Braun signal quartz AB 21S*

Mukul Patel
2007

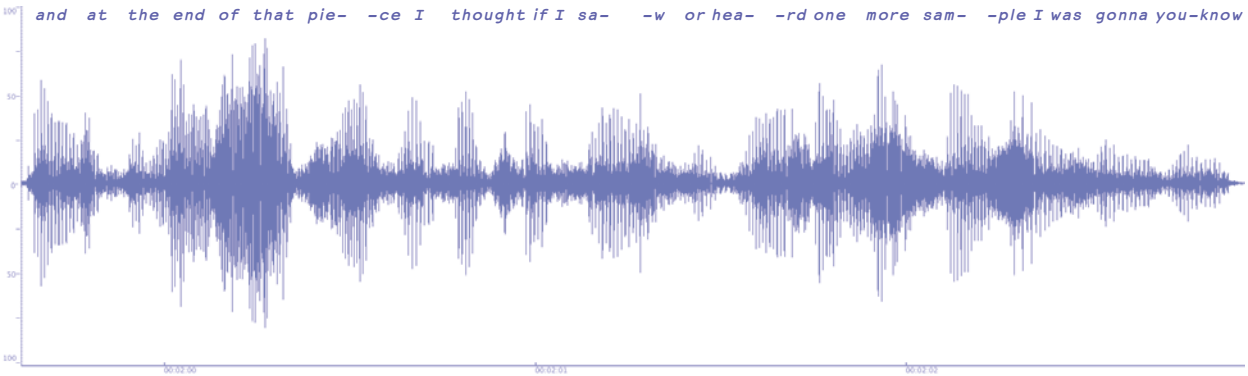
MUSIC LANGUAGE INDETERMINACY LUCK

To have witnessed Reich's *Four Organs* performed once may be regarded as good fortune, but twice within four years can only be described as Wilde – so testified one of the performers after the show at the Almeida Theatre, London, 2005. The programme *Systems in Time 1* (featuring *Come Out*, *Pendulum Music*, *Vermont Counterpoint*, and *Four Organs*) was devised to complement the *Open Systems* show at Tate Modern. *Four Organs*, like many of Reich's early works, remains powerful. The LP (a split release with Cage's *Three Dances*) is worth it for the cover picture alone – and, also, alone, for the sleeve notes on the back, which include his important essay, 'Music as a gradual process'.

I chanced across Reich speaking about music (in an interview on BBC Radio 4 in the early 1990s) before I'd heard any of his works. I immediately sought out both his writings and his music. 'Writing about music is like dancing about architecture' – attributed variously to Elvis Costello, Laurie Anderson, Zappa, Mingus, Monk, and others – describes Reich's texts. (I take it as axiomatic that architecture is to be danced about).

In 2000, in Berkeley, California, I heard him speak again – this time unmediated, at the University's Department of Music, ahead of a concert series. Reich's visit to Berkeley was a keynote of my time there. To attend so many performances (of a music that must be seen to be fully heard) with the composer playing, to be led by him through a group listening of *Different Trains*, to be directed to Alvin Lucier when I asked him to suggest a path for my enquiry – these were all elements of great fortune.

From a radio interview with Steve Reich, KPFA Berkeley, November 2000



I was not so lucky with my seat allocation at the Almeida – in the wings, by the door – or so I thought. But as soon as I sat down, I recognized the fortuitousness of my position, and regretted not having brought some binaural microphones and a recorder: the performance began already with the usher. Young, bored, and a little stern, his instructions looped with insistent melody and rhythm – 'move right across the hall, as quickly as possible, please switch off your mobiles'. And then, semantic variations: 'take your time, slowly as you like, leave your mobiles on', with the speech melody and rhythm intact. Then, *Come Out* – and for nearly two minutes I could barely contain my anger. Instead of a performer with open reel tape recorders, manually phasing and dubbing them live, as Reich had done when he created the work, there was – a CD, identical with the one I had at home, being played back. After the usher's prelude, this was a sore disappointment. But as the playback progressed, the work revealed itself to me in an entirely new manner – and yet again I had to be grateful for my 'sub-optimal' seat. I was about twice the distance from the far speaker as from the near one. The sound stage exploded into three dimensions: pulsing lobes of sibilance chasing each other around the auditorium, revealing sweeping new depths in the work. This is a music that one must move around in (writing about music dancing about architecture).

After the show, I asked one of the musicians about the 'performance' of *Come Out*: apparently, the score instructs for CD playback. When I suggested that it might be more interesting for all if the piece were to be reconstructed on stage live, he became quite excited about the idea of a 'period performance' of Reich's work. He elaborated: to perform *Pendulum Music* using 1960s vintage microphone cables!

To which I could only respond, 'gavagai'.[1]

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[1] 'A carrot is as close as a rabbit gets to a diamond' (Don Van Vliet), or: 'A sudden silence in the middle of a conversation... reveals how dearly we must pay for the invention of language' (E. M Cioran).

SIDELONG GLANCES

2. The sterility of a digital death

Sam Taylor-Wood's *Still Life* (2001) might be more than a Sisyphean video pun beguiled by its technological substrate if only it employed VHS, or other medium that decayed smoothly at a humanly-perceptible rate. (The plastic pen reinforces the point). The work will mature when the playback begins to skip. Until then, there's a conceptual glitch.

Mukul Patel
2007


NIGHTS



Mukul Patel & Tuomas Toivonen
Digital Analogue Soundclash
at Kiasma Theatre, Helsinki
during pixelACHE 2004

Arfus Greenwood
May 2005, New York City

Interview with **Mukul Patel**, first published in July 2005 at THE THING. http://post.thing.net/node/371

Photos by **Jee Won Kim**

AG = Arfus Greenwood
MP = Mukul Patel

SPEAK SLOWLY AFTER THE TONE

On the telephone, artist Wolfgang Staehle stated that I should get out of the house, that we all should get out of the house. 'It is a kind of exercise.' He suggested a small gathering at 149 Ludlow. The ground floor was being prepped for a sound installation by THE THING residency artist Mukul Patel, and a table could be set centre to host 8 to 10 people, sipping on bouillabaisse. It is a very grand idea, indeed, to have a dinner party and an installation simultaneously. I was there.

The nonchalant hostess, Gisela Ehrenfried, floated through the empty space in a flowing black dress, dripping off her small frame like Gena Rowlands in Positano*. Wolf began by mopping. He had an air – there is no task too big or too small. Meanwhile, Mukul was manipulating fields of data on his laptop set at the bar – as though he was the bartender – pouring out a mixture of quivering and exalted sounds. But as the dinner party came together, I could not determine whether I was listening to him creating music for the evening or in 'exercise' for the performance two days away. I took a chair next to his at the table...*

AG – First let me ask, am I listening to an exercise or a work? Take something like Queneau's *Exercices de Style*, or Spoerri's *Topographie Anecdotée du Hasard*, I consider these a kind of exercise in narratology. Or like Cage's *4'33"* that seems to exist as an experiment – as a thing in itself.

MP – Well, a relevant definition of 'exercise' from the OED would be something like a task or activity to practice or test a skill, or a process or activity carried out for a specific purpose, or the use or application of a faculty, right, or process. Whereas, the same dictionary would give the relevant definition of a 'work' as a literary or musical composition or other piece of fine art. But let's ignore this definition of 'work' which seems useless! If we take the first definition of 'exercise', then I'd agree that Queneau's piece is primarily an exercise. Since it declares itself as such, we can also leave it at that. Though, if I had to defend its status as a 'work', then for me, its comic qualities suffice. But I don't think it needs redemption. Cage's *4'33"* seems to be an entirely different matter to me, and I'm approaching it with little knowledge of the commentary. It's a conceptually well defined piece, albeit an experimental

one, since its outcome is not determined. And while it is an exercise by the second and third definitions, it is not by the first. While I might subject others to an incomplete work, I would hope that I never mistakenly present an exercise – first definition – as anything but that. We at ambientTV.NET are conducting a series of exercises called *The Spy School*, which turns surveillance technology against the operators: sous-veillance, which demonstrates what is possible with widely-available devices, and provides a toolkit. But there is a work emerging from this, Manu Luksch's film *Faceless*, which is conceptually whole, and which has a coherent aesthetic. While it deploys many of the techniques of the *Spy School* exercises, it is conceived and presented very differently.

Across the table from us, the architect Jee Won Kim chimed in with an import-export scheme, while the Danish artist, Jakob Boeskov, responded with a doomsday weapon scheme. Such is the tangential nature of a dinner party.

AG – Earlier you mentioned that much of electronica does not seem concerned with a linear narrative structure.

MP – What I meant precisely was that much contemporary electronic music does not seem to be interested in structure. Let's avoid the term 'electronica,' which I think means something very specific in the US. We could just talk about music. (How much music today is non-electronic? As soon as you have an amplifier in the chain... I think it was Björk who once gave a pithy description of 'techno' as 'music made with electricity'). There are two time scales over which structure could be explored much more in electronic music: First, over intervals of seconds. Whether its in the dance club, lounge, or serious concert hall, too few composers and performers break out of rhythmic cycles of 4s, 8s, 16s. So much of what I hear is rectilinear. Where is the triangular music, or the heptagonal? Is it the legacy of rock? Secondly, over the duration of the 'work', and particularly in the forum of dance clubs, where DJs or bands typically play 1–4 hours, there is a lack of overarching structure. The DJ, or increasingly, iPodJ, has access to an unlimited catalogue. Sarasvati, the Indian goddess of music, is lost in an ocean of sonic possibilities without her instrument to help her navigate. In the club, the audience is similarly lost unless the DJ accepts the responsibility to steer a passage – beautiful, terrifying, efficient – but few DJs know where they're starting from and where they're going to. Or perhaps more generously, few are willing to explore unusual routes in

public. We could blame the commercial boom in electronic music, or – what could be thought of as a response to this – the fracturing of scenes into micronations of sound.

AG – So there are a few artists exploring unusual routes...

MP – Yes. For instance, in a set in Montreal in the late 1990s, Kid Koala was turning records in 4/4 time round by hand, juggling the beats into waltz time, spinning a 30-minute story punctuated by sly and self-deprecating jokes. On their *Tsuginepu* EP, Asa-Chang and Junray construct a song that is superficially Japanese Modern – the sonic material is spoken word and sine tones – but structurally, classical Indian, in a time cycle of 12. And recently I heard an astonishing piece by Jonathan Harvey, performed by the Arditti String Quartet with electronic manipulation and spatialisation by Gilbert Nouno.

At the end of the table, three women clustered around artist Christoph Draeger – Heidrun, Ruth, and Nasanin. For a moment, at least, they listened to Christoph as though they might hear something of resonance.

AG – The audience, the reader ... what are you providing? What void are you hoping to fill? What experience?

MP – To be specific about this piece, and literal ... there is a space – not quite a void – on the ground floor of 149 Ludlow. It will be occupied by the sounds of speech, and a light situation that I will create, but also by various bodies doing things quite independently of my intention. I provide an environment, and some people play in it. Perhaps, during and after the installation people will describe a range of experiences to me that I would not have imagined. The piece is a work-in-progress: conceptually, it is not realised. I already know that I want to further develop the way that the piece is read through the recitations of Sanskrit and Japanese phonemes. And in general, I want to research more into phonetics and the possible historical links between South Asian and South East Asian languages. But in terms of pure sound and light in space, I expect to be satisfied – an aesthetic dimension that will, perhaps, draw people off the street.

The artist Simone Huelser turned to me – her beautiful long neck extended – and asked, 'What are you up to?' I didn't know how to answer and turned back to Mukul.

AG – So, what are you up to next?

MP – I feel like I've only just started working with sound and language. So, more of the same, only different. I aim for my work to be true to its medium, to be internally consistent, to cohere with its environment, and to jolt. It's difficult to achieve all those things at once, but if you do it, then there's the possibility of striking an illuminating impact with the user, audience. In Indian art music, authority is shared between the audience and the improvising performer. In 'Music as a Gradual Process', Steve Reich discusses a music that does not privilege the composer, and that is forthright about its own making. I have a definition of ambient works – those that make everything that is not them, appear as a performance. These are not themes in a manifesto, but I keep them in mind. Also, I want to trace histories. This is one way that a work can have a political dimension without becoming reactive.

AG – To trace histories sounds like a wonderful journey. Unfortunately, it seems to me that once you begin to trace it, you will be compelled to resolve it.

MP – Any resolution that happens is temporary and contingent. I'm committed to rigour, but I'm highly allergic to most conceptions of purity, which deny the evolution and migration of form. Ali Akbar Khan, for me the most significant Indian musician of the 20th century, and one whose sensitivity to classical form is exemplary, said in response to a question about Indian versus Western musics, 'Music is music, like potato is potato.' In light of recent battles over patents and ownership, rice would make for a richer metaphor, but the simple, banal truth that long-term historical understanding brings about identification with the other, remains.

AG – It is totally unreasonable of me to monopolize so much of your time at a dinner party, but I am thinking of making this into an interview. I don't know how it will be structured, the tempo, the rhythmic cycle, allegorical or abstract, but I do think that it will be a kind of exercise.

MP – I suppose you mean a conversation.

AG – Yes.

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phoneme, developed by Mukul while in residence at THE THING, New York City in 2005, is a generative sound/light installation that explores the basic sounds of two or more languages. The greatly retarded articulation of language sounds exaggerates the textures of consonants, and stretches vowels into tones. The boundaries of a projected colour field shift according to the varying relationship between the sounds of the languages.

The first version used Sanskrit and Japanese speech sounds, and was installed at 149 Ludlow Street on the Lower East Side in May 2005. Both of these languages organise their basic sounds in a rational manner (Japanese: a i u e o… ka ki ku ke ko… ga gi gu ge go…; and in many Indian languages: k kh g gh… t th d dh… tt tth dd ddh…).

5/BREAKING THE FRAME

VITAMIN'S COCKTAILS

Octopussy

1 fresh figs blended with vodka
1/2 Aperol
1/8 lemon juice
1/8 cream
shake with ice

Genkisthesis

1 Gokuri or fresh grapefruit
1 peppermint tea
1/3 Cointreau
1/3 Campari
1/3 gin
peppermint essence

Cyndi Suicide

1 Di Saronno
1 gin
1/2 fresh passion fruit
1/2 lemon juice
shaken with ice, topped up with
2 dry ginger ale
or on the rocks

White Panther

1 vodka steeped with cardamon
1 amaro
1/2 cream
almond essence
shaken with ice, or as shooter

Photo & recipes: Vitamin AA



Draculina

1 gin
1 Campari
1 Martini Rosso
1/2 amaro
gelatin
allow to set in salt-rimmed glass,
top with fresh raspberry jelly

Thaifood Mary

1 vodka
3 fresh tomato juice
fresh chillies
Thai basil
soy sauce
on the rocks

Thaichito

1 rum
Thai basil
fresh ginger
brown sugar
topped up with 7-Up, on the rocks

Oysterism

1 gin
1/2 lemon juice
1/4 ginger cordial
shaken on ice, topped up
with tonic or soda



This is not a Sex Party

1 gin
1 Cointreau
1 Green Chartreuse
shaken on ice, topped up with tonic
slice of orange

Wrasseberrice

1 whisky
1/2 amaro
1/2 lemon
1 raspberry purée
1 pomegranate juice
with ice

Indigo Blue (not blue at all)

SOPHISTICATED VERSION
1/2 Cassis
1 aquavit
1 secret ingredient
tonic with ice

SWEET VERSION
1 Di Saronno
1 whisky
1 secret ingredient
1/2 lemon juice
mango and apple juice with ice

Ever wondered what to do with Becherovka?

1 Becherovka
1 gin
1 tangerine liqeur
1/2 Irish whiskey (not smoky!)
fresh mint
ice
topped up with tonic

Fed up with Margaritas?

1 tequila
1 Campari
1 red vermouth
twist
ice
topped up with freshly squeezed orange juice

LUX & MUX
2003

Live and online audio-visual-gastronomic performance, commissioned by Moon Radio Web TV

Special thanks to dinner guests Jane Willis, Adrian Gothard, Andrew Humphrey and Masashi Fujimoto; to doc mic hostess: Kelli Dipple; to MYYMÄÄLÄ's Gareth and Voytec in Helsinki for pikniking with us remotely; and to all chatterers from Amsterdam, Baghdad, Birmingham, Helsinki, and Madrid for joining the prandial discussions.

AV DINNERS: EPIC EROS

Combining the fine traditions of TV cookery shows and extreme gastronomy in a sensory networked cook-in, hungry artists gather to reinterpret rituals of food preparation and presentation. Four cunning winners of an online quiz (with cryptic clues involving extreme foods) are invited to ambient.space in East London as guests of honour.



1

Notorious epicure Vitamin AA, assisted by his able auxiliary, Koko di Mari, conjures a series of ambrosial dishes to overload the senses of live and remote participants. The menu is crafted to loosen corsets, set tongues wagging, and unhinge minds without mercy. Licentiousness and depravity duly ensue...



2

1
The dinner guests

2
The kitchen

3
Shane Solanki, against a backdrop of Max/MSP/Jitter spaghetti

4
The blender, an online interface for mixing among three incoming streams

Photos: Gavin Starks

Synaesthesia is getting easier

The sights and sounds of food preparation are captured using multiple cameras and microphones, and manipulated using the Max/MSP/Jitter software environment by LUX & MUX, who provide flashes and glimpses, gurgles and slurps. Lascivious aur-or-al poetics are composed and delivered by sometime Ninja Tune wordsmith Shane Solanki.



3

Networked Cook-Ins

The sounds and colours of Vitamin AA's salacious cooking methods serve as sources for an audio-visual feast, streamed live. Agent Gav's stream blender enables remote participants to mix three different streaming audio tracks – MUX's sizzles and fizzes, Shane's speaking-in-tongue-in-cheek glossolalia, and a documentary stream with behind the scenes commentary by the rest of the crew, which reveals the studio setup, tools and techniques. Simultaneous feasts take place in Amsterdam, Baghdad, Birmingham, Helsinki and Madrid. A chat channel enables remote participants to join in the dinner conversation.



4

Inspired by texts including: Jean Anthelme Brillat-Savarin's *The Physiology of Taste (Or, Meditations on Transcendental Gastronomy)* of 1825, David Madsen's *Confessions of a Flesh-Eater* (1997), Georges Perec's 'Attempt at an Inventory of the Liquid and Solid Foodstuffs Ingurgitated by Me in the Course of the Year Nineteen Hundred and Seventy-Four' (originally published in *Action Poétique*, 1976)...
and films including: Marco Ferreri's *La Grande Bouffe* (1973), Luis Buñuel's *Le Charme Discret de la Bourgeoisie* (1972), Xiaowen Zhou's *Ermo* (1994), Juzo Itami's *Tampopo* (1985), Nagisa Oshima's *Ai No Corrida* (1976)...

Quiz clues

1. aperitif (3, 7)
Buñuel's dry use for a ray of light

2. hors d'ouevre (5, 8, 6)
This aphrodisiac marine surprise
is commonly found between the thighs

3. entrée (4)
Kabuki Killer – Puffer Daddy
Who is this asiatic saltwater baddie?

4. on the side: (9)
It seemed to me that these celestial nuances betrayed the delicious creatures that had amused themselves by becoming vegetables and which, though the disguise of their firm, edible flesh, gave a glimpse in these dawn-born colours, these rainbow sketches, this extinction of blue evenings, of the precious essence that I would still recognize when, all night following a dinner where I had eaten them, they played their crude, poetic farces, like one of Shakespeare's fairies, at changing my chamberpot into a bottle of perfume.

5. dessert (3, 4)
A former king of Poland
defected to France
bringing Arabian Nights
to a drunken dinner dance

6. liquer (8)
Sweet when squeezed from
the fruit of Cybele
(but the fruit itself –
deadly when bitter)

7. cheese... (4, 5)
...taken to its logical conclusion

8. after dinner (4, 5)
Its expense and fragrant aroma
products of the bowels
of a paradoxical bisexual



1. dry martini



2. rocky mountain oysters



3. fugu



4. asparagus

Shane's Aur-or-al Poetics (xxxcerpts)

[...] A raw pearl necklace
consumed by the reckless...
Human lips meet oyster hips
In an orgiastic embrace
that very moment
when slippery sensation
slides down the sides of the throat
Into the belly of a whale slips our heroine
Oceans implode within
Neptune beckons in a fleeting pause
and then aftertaste
the lingering satisfaction
a dark salty question mark [...]

[...] I can't bear these fruits
taking off their clothes
it makes my mouth water
it makes my panties wet
these parting shots of summer
so sweet and full of sex [...]

[...] Fall into the arms
of the truffle's handsome charms
Your nostrils flare
You stretch and yawn
Animal instincts thrice reborn
You growl and purr
Skin becomes fur...
'Oh, my', says the truffle,
'you do look sweet!
come sit here on my lap, pretty thing,
and tell me all your secrets' [...]

Stills from the animated quiz clues



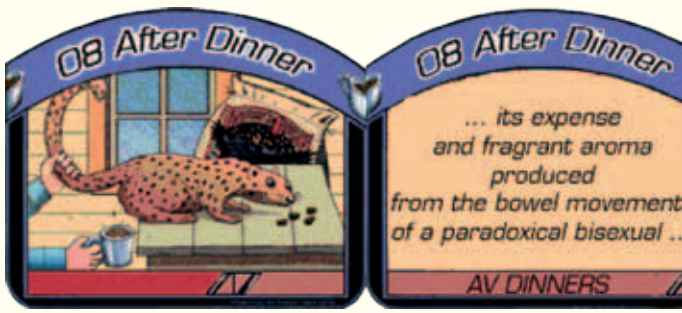
5. rum baba



6. amaretto



7. casu marzu

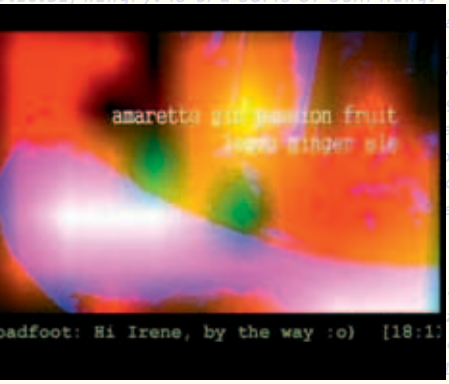


8. kopi luwak

Background: Transcript of chat channel

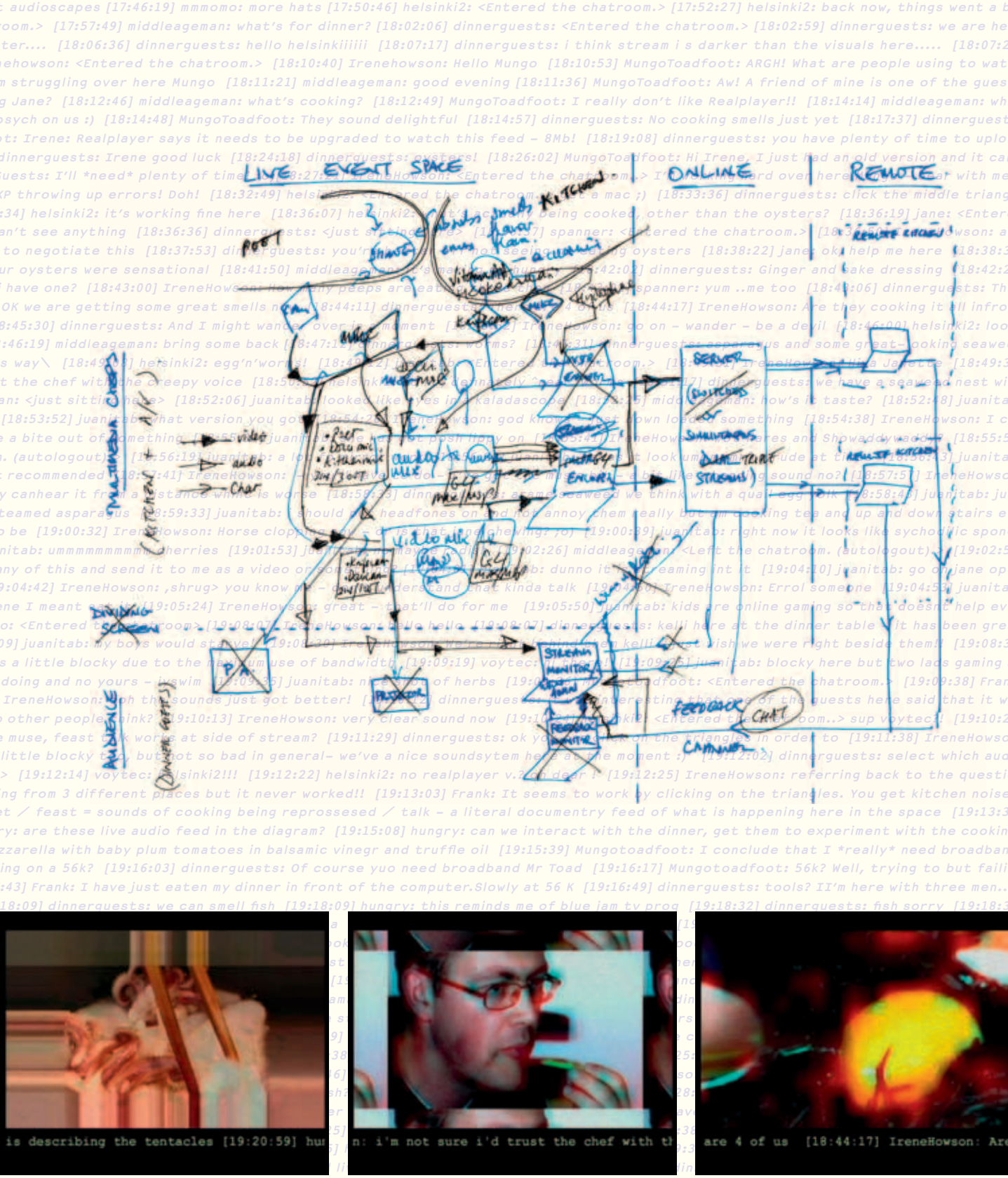
Below: Video stills from the live stream

Right: Preliminary technical sketch for AV Dinners








LIVE EVENT SPACE
ONLINE
REMOTE
SERVER
(DISTILLERY OF SUBMERGENCE STREAMS)
REMOTE KITCHEN
REMOTE AUDIENCE
MULTIMEDIA CHEFS
(KITCHEN)
AUDIENCE
(DINNER GUESTS)
DIVIDING SCREEN
STREAM MONITOR
FEEDBACK
CHAT
CAMERAS
video
audio
Chat
is describing the tentacles [19:20:59] hu
n: i'm not sure i'd trust the chef with t
are 4 of us [18:44:17] IreneHowson: Ar

Manu Luksch & Mukul Patel
2006

Single screen 10-minute video installation with labeled cans of food

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AV DINNERS 2: AJU J.'S NEW YEAR FEAST – IN THE YEAR OF THE FIRE DOG

A New Year's feast is prepared according to a traditional Akha recipe appropriate for the year of the Fire Dog. Under the skillful guidance of chef Aju J., a dog is chosen, slaughtered, elaborately spiced, and sautéed in a wok. The Akha distinguish between dogs that are to be eaten, and others that are used to hunt or guard. Dog-lovers of a different kind, who feel squeamish about eating their 'best friends', should look away now.

Photo: Installation at Temporary Art Museum Soi Sabai, Bangkok 2006, courtesy Makoto Yoshihara and TAMSS



TELEJAM

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ambientTV.NET
2001–04

TELEJAM *is a forum where audiovisual artists and musicians explore the possibilities and limitations of streaming media and its interaction with other media and physical spaces.*



TELEJAM_01/*DELAY_28*

In July 2001, the broadbandits from ambientTV.NET and Latvia's rigasound.org (a 24-hr artist-run net.radio station) held up the information superhighway with the first *TELEJAM* laboratory. Audio-visual jammers based in Public Life (London) and Casablanca (Riga) worked in 'delayed synchrony'. Sound and image underwent punctuated accretion, with the jammers at each physical location mixing live into the received media stream, before sending it back online. Taking place on the occasion of broadbandit Ilze Black's 28th birthday, in London the crew worked with patterns of seven, and in Riga, of four. The experiment was fortuitously blessed with a 28-second transmission delay, generating a laid-back feedback piece.

TELEJAM_01 ARTISTS
London: Manu, Mukul, Kertal, Milky Bar Kid, Joanna and many more alchemists;
Riga: DJ heincha, d-9, gonzalez, heleena, NEI, Linards Kulless, MKII, pk

TELEJAM_02/*FRO_03*

Extending the audio-visual jam to three remote locations, *TELEJAM_02* celebrated the 3rd anniversary of independent Austrian FM station Radio FRO 105.0 (Linz) in November 2001. The three-phase transcontinental party featured artists based at ambientTV.NET's studios in London, the Dizzi club in Riga, and Posthof in Linz.

TELEJAM_02 ARTISTS
London: Mukul, Mario Ventrelli, Manu Luksch, Rachel Baker, Vortex, Black, Christa Geiselhofer, Ian, Kate Rich;
Linz: Fadi Dorninger (head operator, main mixer), Dietmar Bruckmayr (Reden an die Nation, Stimme), Martin Greunz aka Impact aka Nautic Cuts, Jomasound;
Riga: Kulless, Ratnix, F1, dill9jah, mums speelees Ivarx & @TOMS (No Rest), NGC-5128 (Fabrique)

TELEJAM_03/*flipflop-TRyPTiCHON*

flipflop and *TRyPTiCHON* (2002–04) further developed the *TELEJAM* idea to use audio-video-data jamming between mobile devices. These projects would eventually develop into the critical network dance/theatre work, *Myriorama* (2004).

Manu Luksch & Mukul Patel

2002

R & D document

FLIPFLOP
A SOLO-PERFORMANCE FOR TWO BODIES IN MULTIPLE LOCATIONS

A proposal

flipflop is a polemical exploration of the pathos and comedy in our ambivalent romance with communication technology. There are two audiences: those who have come to watch the show, and those who are going about their everyday business in the streets neighbouring the venue. Between these audiences is a human interface – one character in two bodies (the performer in the venue and the roaming performer), with a talent for cornering people at parties and gathering crowds on street corners. Via this performing interface, the audiences (inside and outside the venue) emerge as both actors and directors, both surveilleurs and the surveilled. The title alludes to a bistable logic device (the foundation of computer memory), and to the act of walking.

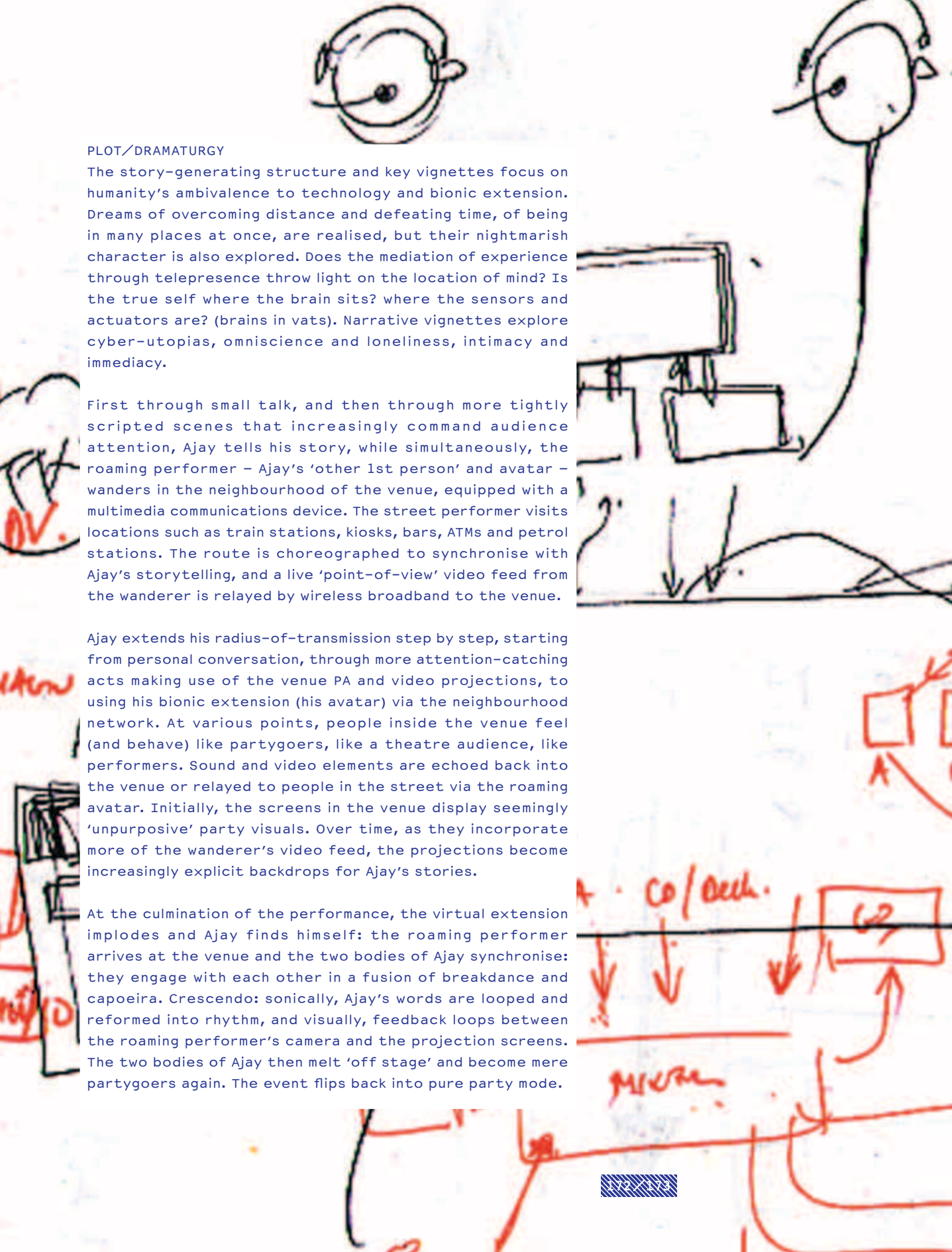
SETTING

The audience is invited to a party. There are the usual aids to conviviality: music, lights, video projections, a bar; though just where a performance might take place is unclear. There is no stage, there are no seats.

The guests chatter and network, hang around at the bar and flirt, dance and drink, listen to music and enjoy the view. Over the course of the evening, one of the partygoers (actor and motion poet Ajay Naidu) emerges as a performer, and the audience gradually realizes that it is participating in theatre.

CHARACTER

In-venue performer Ajay's 'character' is a storyteller, a megalomaniac who wants to conquer time and space with his omnipresence mediated by technology. He is on a search for enhanced social connectivity, enhanced human being-hood. He extends himself through bionics – the roaming performer is his avatar, in the 'real' space outside the venue. Ajay directly addresses audience members, allows himself to be interrogated by them, provokes them and serves as interface between them and the roamer. These interactions are caught by the roamer and thrown back to the venue.



PLOT/DRAMATURGY

The story-generating structure and key vignettes focus on humanity's ambivalence to technology and bionic extension. Dreams of overcoming distance and defeating time, of being in many places at once, are realised, but their nightmarish character is also explored. Does the mediation of experience through telepresence throw light on the location of mind? Is the true self where the brain sits? where the sensors and actuators are? (brains in vats). Narrative vignettes explore cyber-utopias, omniscience and loneliness, intimacy and immediacy.

First through small talk, and then through more tightly scripted scenes that increasingly command audience attention, Ajay tells his story, while simultaneously, the roaming performer – Ajay's 'other 1st person' and avatar – wanders in the neighbourhood of the venue, equipped with a multimedia communications device. The street performer visits locations such as train stations, kiosks, bars, ATMs and petrol stations. The route is choreographed to synchronise with Ajay's storytelling, and a live 'point-of-view' video feed from the wanderer is relayed by wireless broadband to the venue.

Ajay extends his radius-of-transmission step by step, starting from personal conversation, through more attention-catching acts making use of the venue PA and video projections, to using his bionic extension (his avatar) via the neighbourhood network. At various points, people inside the venue feel (and behave) like partygoers, like a theatre audience, like performers. Sound and video elements are echoed back into the venue or relayed to people in the street via the roaming avatar. Initially, the screens in the venue display seemingly 'unpurposive' party visuals. Over time, as they incorporate more of the wanderer's video feed, the projections become increasingly explicit backdrops for Ajay's stories.

At the culmination of the performance, the virtual extension implodes and Ajay finds himself: the roaming performer arrives at the venue and the two bodies of Ajay synchronise: they engage with each other in a fusion of breakdance and capoeira. Crescendo: sonically, Ajay's words are looped and reformed into rhythm, and visually, feedback loops between the roaming performer's camera and the projection screens. The two bodies of Ajay then melt 'off stage' and become mere partygoers again. The event flips back into pure party mode.

at_N056deg48'182"_W003deg58'299"_altchecksum0425 >here_hear >head135_vel230 >untilyous

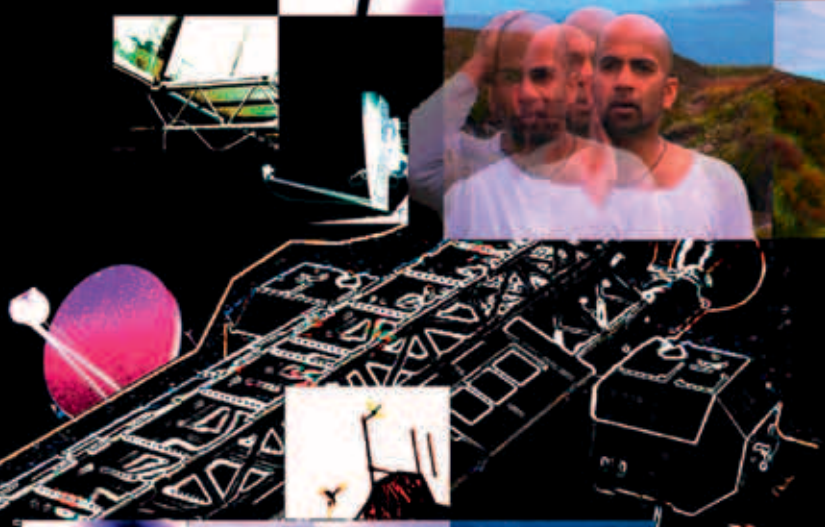


synchronici

comix rushes for flipf

guided by voices<<<mm-cha mm-cha<<<strides out the ride<<<th
whathafuck??!!<<<sisyphus?cissyfuss!<<<keep on keeping on
lo!<<<amidst purple heather<<<burning off mor









meanwhile,suddenlylater...



ksshhhhhh...nmvreeeuuu



flipflop by manu luksch_ajay na
solo performance for 2 bodies in mu
an ambientTV.NET production_comin
flipflop@ambientTV.NET_synchronicity



Perthshire, Scotland, July 2002: preproduction workshop for *flipflop* at Makrolab, a sustainable, mobile, communications and meteorological research laboratory.

A song carries Ajay in unknown lands, audio waveforms turning into undulating terrain. After a long journey he is desolate and begins to explore his unbound inner space. He re-encounters himself as newly arrived from a planet of alienation.

http://
makrolab.ljudmila.org

Michael Uwemedimo
2002

Notes from the movement workshop with Manu Luksch, Mukul Patel, Ajay Naidu, Michael Uwemedimo, and Andrea Zimmerman, July 2002

Reflections on form

Capoeira finds a salient place within the technical and thematic framework of *flipflop* – a framework of surveillance apparatus that stages the compositional aspects of feedback and exploits them to dramatic effect through a series of projections, echoes and shadows.

Capoeira is corporeal dialogue – an exchange in which one's partner is a mirror possessed of a will to deceive, dissimulate and disguise. Each capoerista echoes the other, a play in which it is possible to out-manoeuvre one's own shadow, an echo that tends to a Chinese whisper. Each partner extends the movement of the other and turns it against them. Dissimulation is central to the form; not only do participants deceive each other, but the spectacle of the *roda* (circle: the space where capoeira is played), is used as both an attraction and a distraction – it gathers a crowd and then diverts them while their pockets are lightened. Further, the form itself is a disguise. Martial practices amongst the slaves who developed capoeira were prohibited. The martial implications of the form had to be disguised as a recreational, quasi-religious dance.

Also like *flipflop*, capoeira is a syncretic discourse, in as much as it draws on and fuses, martial, musical, religious and dance forms from the communities along slave routes to the African interior. Along the course of its development, it has also incorporated movements and strategies from a number of other martial arts, most notably Taekwondo.

Mukul Patel
2003

Trials of technology (and its sponsors)

flipflop required a light, portable hardware solution to transmit and receive audio and video over WLAN (wireless network). The devices would be worn by both performers and would need to be robust enough to function outdoors in poor weather, and indoors while they played capoeira.

One of the project's funding agencies tried to pass off some 'wearable PCs' (made by Swiss company Xybernaut) as support-in-kind, and even attempted to stipulate their use in the work. Presumably the result of a sponsorship deal, the PCs, with 'futuristic' peripherals including wrist-mounted keyboards and head-mounted displays (HMDs), were barely functional. We conducted a thoroughgoing technical evaluation

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Left: Photos from the movement workshop by Anthony Auerbach (above) & Ilze Black (below)











[1] www.ambienttv.net/3/flipflop/inprogress/flipflop_report_nov2002.pdf

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Above: The Xybernaut wearable computer and its numerous design failings. Photos: Mukul Patel

Right top: flipflop ***movement studies workshop Photos: Anthony Auerbach***

Right: Video data from the movement studies workshop, manipulated live by Jaromil using FreeJ/dyne:bolic on an 'obsolete' Pentium I

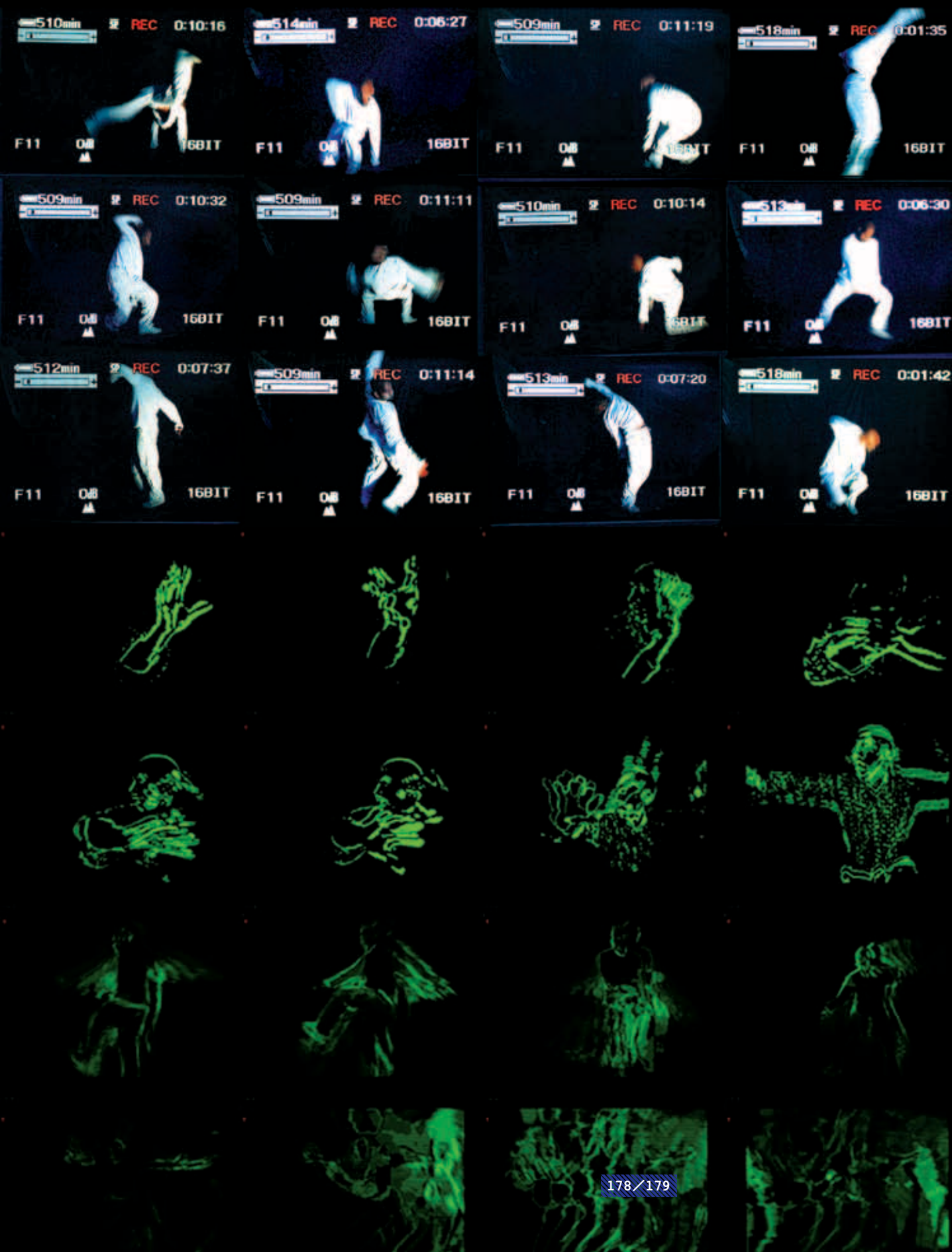
of the devices[1]. Many of the failings were fundamental, for example: insufficient number of sockets for peripherals and insufficient clearance for peripheral plugs, no option for wireless peripherals (leading to 'cable spaghetti'), PCMCIA card chamber too small for wireless cards, HMD unusable in daylight, headset not adjustable to different head sizes, unreliable connections between hard drive and motherboard. In terms of both function and ergonomics, the devices were completely unsuitable for any computing task – let alone the rigorous use that *flipflop* would have subjected them to.

Given the state of ultramobile PC development at that time, we decided to move away from the PC/streaming media platform. There were also connectivity issues with WLAN, particularly in the 'urban canyons' surrounding potential venues. On paper, WLAN has the necessary range, but in practice, in the city it is vulnerable to signal attenuation and multipath distortion. As part of *The Spy School Exercise #2*, we had tested miniature imaging chips and microphone capsules in combination with analogue UHF transmitters and receivers. While adequate for that project, range and noise issues plagued this approach too, making it unsuitable for a larger scale theatrical piece.

Advances in mobile phone networks (3G) promised to fulfill *flipflop*'s technical requirements, though the use of a closed network (as opposed to the open WLAN protocol) jarred with our championing of independent media infrastructure. This concern notwithstanding, we trialled the Motorola A920, one of the first 3G phones with a built-in GPS (Global Position System) receiver. It soon became clear that video calling was not yet practical, and given the earlier difficulties with video over WLAN or UHF FM, together with the availability of GPS, the original dramaturgy based on video telepresence was abandoned, in favour of an approach using sound, text, and location data.

A BRICK IN A WALLED GARDEN

When attempting to access the GPS data from the A920, a major problem arose: the phone would not run third-party applications unless they had been 'signed' (approved) by the network operator Hutchinson, ostensibly to prevent the distribution of malicious software. Hutchinson was running a developer competition at the time, but would only provide software emulators to the public – useless for applications that required access to the phone or GPS radio chips. Despite lobbying, Hutchinson refused to allow full access, so inevitably the phone was hacked. When we eventually accessed GPS


510min REC 0:10:16
514min REC 0:06:27
509min REC 0:11:19
518min REC 0:01:35
509min REC 0:10:32
509min REC 0:11:11
510min REC 0:10:14
513min REC 0:06:30
512min REC 0:07:37
509min REC 0:11:14
513min REC 0:07:20
518min REC 0:01:42
F11
0dB
16BIT

data from the phone, we discovered that the GPS receiver on the phone only updated its location every five minutes – too infrequently for precise tracking. Like the Xybernaut computer, the Motorola phone failed to deliver on its hype.

After a year of trials, we eventually assembled a working solution for mobile sound, text and location data communication using the Palm Tungsten W (a PDA and 2.5G mobile phone) coupled with an external GPS unit. While bulkier and more expensive than the A920, this device combination was robust and reliable, and proved itself in several performance works.

With the replacement of video telepresence with sound, text and location data as the dramaturgical basis, and open WLAN data channels with a closed, proprietary mobile phone network, the *flipflop* project had changed substantively. We tested the Palm/GPS combination under the title *TRyPTiCHON* at the DMZ Media Arts festival in London (November 2003), and subsequently developed a performance for *pixelACHE 2004* in Helsinki. The final manifestation of this line of enquiry was the networked dance/theatre work *Myriorama*, presented in London and at ISEA 2004, Helsinki. The general ambivalence towards technologically-mediated omnipresence/omniscience of *flipflop* was replaced with a sharp critique of network surveillance. This refining of focus occurred across our practice, as playful explorations of new technologies were increasingly tempered with a growing awareness of the systems of control that they instituted.



Catalogue of the DMZ Media Arts Festival, London 2003

Right: Data traces from wandering performers of TRyPTiCHON 1.0 *at DMZ, London*

TRYPTICHON

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ambientTV.NET

2003–04

a leash of minstrels
sings streets into existence
leashed by time's ticks...

TRyPTiCHON combines sound and text transmissions and location data from wandering performers with mobile phone/GPS units, to form a collaborative piece writ large over the neighbourhood. Each mobile unit sends text and GPS data via the mobile phone network provider to a server computer at the base station, from where it is relayed to other machines on a network for processing in the Max/MSP/Jitter application.

In November 2003, *TRyPTiCHON 1.0* was shown as a work-in-progress at DMZ Media Arts Festival, London. Aims of the exercise included a technical proof-of-concept, the discovery of salient data types and the exploration of narrative.

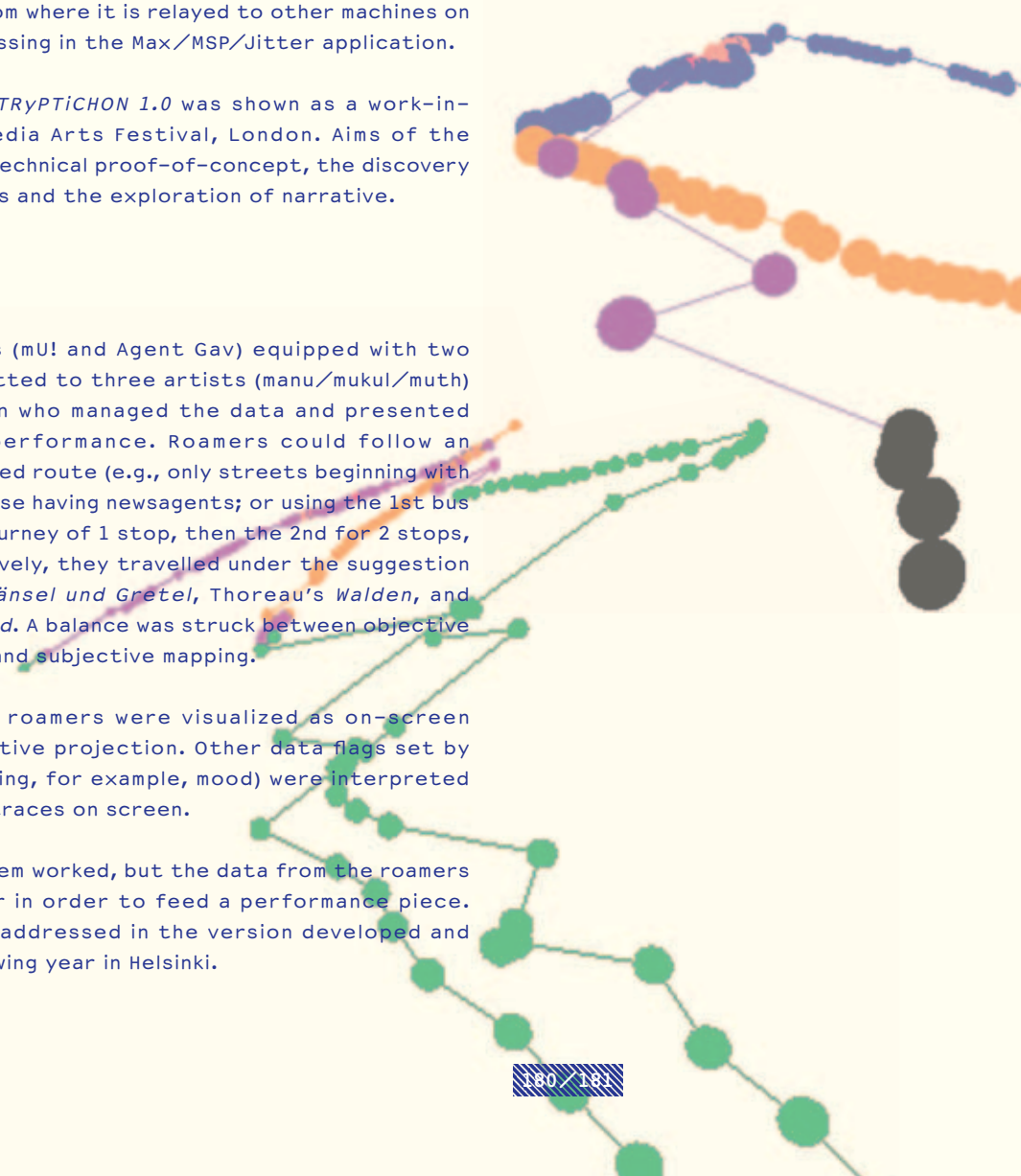
TRyPTiCHON 1.0

Roaming performers (mU! and Agent Gav) equipped with two mobile units transmitted to three artists (manu/mukul/muth) at the base station who managed the data and presented the audio/visual performance. Roamers could follow an algorithmically-derived route (e.g., only streets beginning with the letter 'C', or those having newsagents; or using the 1st bus that arrives for a journey of 1 stop, then the 2nd for 2 stops, and so on). Alternatively, they travelled under the suggestion of texts such as *Hänsel und Gretel*, Thoreau's *Walden*, and Kerouac's *On The Road*. A balance was struck between objective (if non-traditional) and subjective mapping.

GPS fixes from the roamers were visualized as on-screen traces in a perspective projection. Other data flags set by the roamers (signifying, for example, mood) were interpreted and used to modify traces on screen.

Technically, the system worked, but the data from the roamers needed to be richer in order to feed a performance piece. This point would be addressed in the version developed and presented the following year in Helsinki.

TRyPTiCHON 1.0 at DMZ Media Arts Festival, London 2003: a wandering wireless performance by manu/mukul/muth with malo/mU!/minna and agent Gav



Gavin Starks
November 2003

TRyPTiCHON 1.0 Roamer log

I started by cycling to Canary Wharf. Noted the sterility of the place: it was like a ghost town. Found a neat little street where older houses were overshadowed by the newly-developed 'New Providence' buildings directly behind them.

At New Providence Wharf Development, stopped and took photos of the building. Within five minutes a security guard came out and told me that photography was forbidden; I replied that since I was on a public highway, he had no jurisdiction over me. Happened to be on the phone to Mukul and was relaying some of the conversation to him, and holding the phone/GPS unit as if it were a measuring device, all of which made the guard nervous. Eventually he left.



Went up to all the CCTV cameras I could find and took photos from directly underneath. Within a minute, the manager was out asking what I was doing. Continued to use the phone/GPS unit as if it were a measuring device, which really unnerved him. He kept trying to see what was on the screen. He did not want 'the tabloids taking photos'. I confirmed they were 'non-commercial' and he went away. There was also a radar unit right outside the building.



Proceeded south east toward the Greenwich Tunnel, noting the significant contrast in architecture, but similar desolation in the people. Travelling through the tunnel, was able to confirm that it is completely radio-quiet for cellphones. The location could be of use for anonymity (though you'd be seen entering and leaving). There was much more life in Greenwich: bustling, happy people. Looped around Deckspace and headed back via the south bank of the river. Later: a chance encounter with a beautiful sailing ship in front of Canary Wharf; further along, I was held up as Tower Bridge opened to let the ship through.



Took far longer to traverse the south side of the river because of the new, exclusive property developments that bar access to the riverfront. I'd find my path repeatedly blocked and would have to double back and take an alternative route. (This happened eight times: very annoying.)



Arrived back at DMZ at 6 pm, having cycled for about 4 hours.

Photos: Gavin Starks

TRyPTiCHON 2.0

the city rewritten
plots upon plots
textured in dance

The audience at the Kiasma Theatre was led all the way down the steps of the tiered seating area and invited to take their places inside a hexagonal tent of veils raised on the stage. A roaming performer equipped with a mobile phone/GPS unit left the building on a walk. As the lights dimmed, the semi-transparent walls of the tent became a myriad of projections and the stepped auditorium a stage for a dancer dressed in white. The bip-bip-bip sound of a pedestrian crossing signal was heard, introducing an evocative live surround-soundtrack.

The walk, framed between the steps of Helsinki's Parliament building, the steps of Tuomiokirkko (the Lutheran Cathedral), and those inside the theatre, also formed the framework of the 45-minute show as text messages from the roamer and positions reported by GPS were mapped in real time projections. The roamer wrote in one of three modes: internal space (my world), shared space (our world), external space (their world).

The live messages from the roamer emerged from the context of layers of archived walks and the earlier roamers' messages, and threaded their way through a forest of texts across the walls of the tent. As the roamer's data was visualised and sonified, the dancer interpreted and narrated the three modes of physical and emotional space through her movement. She was also multiplied: seen through and casting shadows on the tent-screens, her image projected from archive video and also via a live camera. Sight lines from the audience, seated at will in the tent rather than in traditional theatre rows, criss-crossed as they traveled to the manifold figures of the dancer and the architectonic threads of texts.

ambientTV.NET's interest in 'locative media' (mobile position-aware systems) stems from earlier 'telejams' which linked performers in different cities with live video, and draws from the tradition of psychogeography the notion of a spatial encoding of narrative and its subsequent unveiling. The development of *TRyPTiCHON 2.0* has yielded valuable technical solutions, but above all has generated critical approaches to locative media that prevent the work from being a gadget-piece.

Anthony Auerbach
April 2004

TRyPTiCHON 2.0 by ambientTV.net (Manu Luksch, Mukul Patel, David Muth)

Live locative media and dance performance. Developed at the NIFCA Media Air artist residency on Suomenlinna, Helsinki, Spring 2004.

Presented at Kiasma Theatre, Helsinki as part of the *pixelACHE 2004: Audiovisual Architecture* festival.

With: Hanna Ylitepsa (choreography and dance), Gavin Starks (roaming performer), Camalo Gaskin (costume and tent design) and featuring walks through Helsinki by John Hopkins, Mariko Montpetit, Nick Grindell, Hermanni Ylitepsa, Voytec Mejor and others





Left: TRyPTiCHON 2.0 *in and around Helsinki, April 2004*
Photos: Anthony Auerbach, Camalo Gaskin, Mariko Montpetit, Mukul Patel, Gavin Starks

Above: TRyPTiCHON 2.0 *performance at the Kiasma Theatre, Helsinki 4 April 2004*
Photo: Anthony Auerbach


skyscrapers
to see the sky
rs or pedestrians



Left and above: TRyPTiCHON 2.0 *at the Kiasma Theatre, Helsinki 4 April 2004*
Photos: Anthony Auerbach

"The basic survival of the poor, undocumented or 'illegalised' often depends on the ability to operate without detection, the necessity of ID, or the creation of official records. This grey zone of anonymity is constantly squeezed in the interests of population management, border enforcement, welfare clamp-downs, technocratic convenience and, of course, the economy."

Josephine Berry Slater, from her Editorial for Mute *magazine, Vol. 2, No. 7, 2008*
www.metamute.org/en/Editorial-Mute-2-7

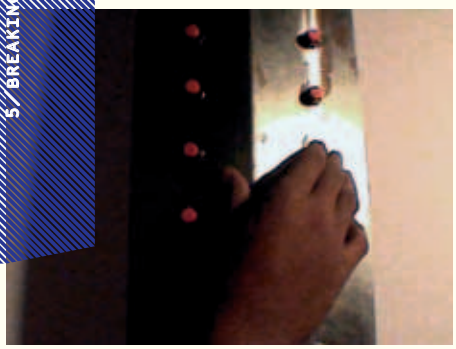


Students at Srishti College of Art, Design and Technology in Bangalore setting up movable projection screens for the installation Hinges On

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Manu Luksch & Mukul Patel
2005

Responsive media installation by students at the Srishti School of Art, Design and Technology, Bangalore, India





HINGES ON

Hinges On is a responsive media installation that functions as a comment space on the economic 'grey zones' of the information & communication technology sector in Bangalore. The work was developed by students at the Srishti School of Art, Design and Technology during a month-long tactical media lab that we led in April 2005, and presented at Ars Electronica in Linz that September.

Visitors enter through a sparsely-lit sound tunnel, where they are exposed to an audio montage of failed attempts at information retrieval. Released into the video installation room, they are faced with large hinged doors in the centre of the space that serve as target surfaces for the projectors on each wall. As the door-screens are turned, they catch a juxtaposition of projected images, consisting of reenacted interviews with people involved in Bangalore's info-techboom, from labourers laying cables to the police chief in charge of cyber crime. Visitors to the installation choose different permutations of the video reenactments using a switchboard.

The coexistence of mainstream multinational branded markets and thick multilayered networks of informal economies provides a complex space to explore questions regarding access, distribution and regulation of products and systems. The employment and revenue generated in the informal sector is significant, making the question of regulation particularly interesting.

There is no one story. We collect the voices, opinions, viewpoints and concerns of a wide range of people together in one space where they can be in dialogue with one another. Visual fragmentation creates voids and makes room for interaction, interpretation and reflection.

– Ramyah Gowrishankar

What is intriguing about the setting is that one is provided the ability to control what one views, which in turn reflects the way in which one functions in and interacts with these systems. Seemingly, every dimension of the economy is visible

simultaneously. And yet some aspects of the perspective do not reveal themselves unless the right door is opened, the correct alignment is struck. It is not enough to be mere spectators – move things around till the picture becomes clearer!

– Nishita Kavadia



The informal economy and the formal live like old neighbours in a system of mutual understanding.

The characters in the game we call our economy become other characters in a play that we construct. These characters want to speak to each other, to locate themselves in a dialogue that has never before taken place.

Ideas emerge for an interface: how to get an audience to interact with the characters that increasingly define the fabric of their world?
– invite them to conversations through telephone handsets
– allow them to juxtapose characters, using movable projections
– provide a switchboard to physically connect characters in dialogues

– Divya Vishwanathan



SIDELONG GLANCES

3. Measuring the gallery

At *Belladonna*, ICA, London 1997: confronted by Anish Kapoor's highly polished cosmic navel yawning out of the wall, Sue promptly stuck her head in it. The guard became very agitated, pointing to a nearby sign that said 'Please Do Not Touch'. A war of attrition between human and steel is one-sided. But anyway – wasn't that sign part of the piece? The work is entirely about boundary. Was she not already touching it by occupying the void it emptied into? or even by merely being mirrored in it?

Mukul Patel
2007

Mukul Patel
2008

ambient.vista 2008 artists: Wolfgang Staehle (New York/Berlin), Tuomas Toivonen (Helsinki), Fahim Amir (Vienna), Shiho Fukuhara (Tokyo)

Works were shown at ambient.space as part of the Whitechapel Gallery's 'First Thursdays' late-night openings, and at E:vent Gallery in Bethnal Green; Fahim Amir also performed at the Austrian Cultural Forum, London. There was a group show in October as part of E:vent's *The Beautiful Children* at the V22 Wharf Road project.

ambient.vista 2008 artist residencies generously supported by:
Simon Bishop
Arts Council England
Austrian Cultural Forum
The Japan Foundation
Embassy of Finland London

London gallery shows in partnership with Colm Lally, E:vent Gallery.
www.eventnetwork.org.uk

Programme Director and Producer: Mukul Patel

www.ambientTV.NET/content/?q=ambientvista

AMBIENT.VISTA 2008
ARTIST RESIDENCIES AT AMBIENT.SPACE

The *ambient.vista* residency series invited international artists to reframe the city by critically addressing the vista over it afforded by ambient.space, the studio/workshop/salon of AIS. The creation of an artist residency was a natural development of the informal networking and hosting that AIS has been engaged in since inception.

Located on the 7th (top) floor of an industrial building in South Hackney, ambient.space has a continuous 12 m stretch of window facing due south, overlooking Regent's Canal and a gasworks. The view encompasses the City and Docklands, the grime of Bethnal Green, church steeples and the Kingsland Road Mosque, the Royal London Hospital's helipad, Tower Bridge, the Barbican, Centre Point, and the Millennium Dome; and above the horizon: columns of smoke rising from disused properties; violet explosions of fireworks celebrating Eid, Diwali, Chinese New Year, or Guy Fawkes Night, flocks of geese leaving Victoria Park and streams of aircraft approaching Heathrow and City airports, and an hour's advance forecast of the local weather. Not least, the studio grants a perspective on the rapid and controversial redevelopment of the East End in the lead up to the 2012 Olympics.

Wolfgang Staehle: Imperial Gas Works

EXCERPTS FROM A CONVERSATION WITH MUKUL PATEL

MP – You've made several 24 hour (or longer), live broadcast or recorded time-lapse photographic panoramas. How does *Imperial Gas Works* fit into this series?

WS – *Imperial Gas Works* is a recent piece in what one could call a series of 'vedute', which is a genre of landscape painting that's been around since the early 17th century. Technically speaking it's not painting, of course; it's rather some sort of chrono-photography. A static camera takes a picture every couple of seconds with intervals usually in the 5 to 10 seconds range. Because they looked so much like today's postcards, vedute paintings were sometimes considered a minor genre, but I think there is something quite metaphysical about showing

the world just like it is. For me the most exciting thing is everyday reality, the fact that it occurs at all.

I always liked realist painters, such as Vermeer or the painters and photographers of Neue Sachlichkeit ('new objectivity') in the early 20th century. This cool, objective and distanced style suits me quite well – it's in itself a statement against the prevailing trends in contemporary art, which increasingly favour big spectacular productions. My work is not very entertaining and only few critics grasp the phenomenological underpinnings. It stays pretty much on the periphery of the major trends, although recently there were some discussions in a few art journals about 'slowness' as a phenomenon in the works of certain artists.

MP – Interestingly, the time-lapse aspect of your work also diminishes Docklands and the City relative to other parts of the image, by muting the strobing lights on top of the buildings, which normally draw the eye. When you talk about the 'phenomenological underpinnings' of your work, are you pointing to the temporal aspect of perception?

WS – Time is certainly an important aspect of the work. By using stills that are refreshed at certain short intervals, I feel I can affect a slight shift in perception. It's very different from looking at a continuous film or video of the same scene. To me it's almost hypnotic to watch the slight changes from one image to the next. The almost imperceptible changes in the light, a cloud moves a tiny bit or a crane in the distance shifts its position. Time moves, but it also quite literally stands still.

By 'phenomenological underpinnings' I didn't mean any investigation into the mechanics of human perception, but rather about achieving a temporal state of perception stripped of any intentionality. An awareness that there is something, rather than nothing. I'm perfectly aware that in contemporary culture this sounds pathetic and banal at the same time, but think about it.

MP – How much of your work have you viewed in real time?

WS – It's not necessary to view it all. Just look as long as you wish and then maybe return a few hours later. I think the only time somebody watched all 24 hours was when the Metropolitan Museum bought *Eastpoint*, a Hudson River vista, and some poor guy had to sit and check each and every frame of it.



Wolfgang Staehle, in residence intermittently March–July 2008

Imperial Gas Works
Digital photographs, taken at approx. 10 s intervals over 24 h periods

MP = Mukul Patel,
WS = Wolfgang Staehle
The conversation took place on 11 September 2008.



Imperial Gas Works
26 April 2008 (05.18.46)
Digital chrono-photograph
(Wolfgang Staehle, 2008)



Imperial Gas Works
8 July 2008 (12.40.06)
Digital chrono-photograph
(Wolfgang Staehle, 2008)

Tuomas Toivonen: New Rooms (NOW AVAILABLE)

Tuomas Toivonen's mixed-media sculpture, *New Rooms (NOW AVAILABLE)* was installed along the public balcony adjoining ambient.space on the seventh floor of Regent's Studios. Accompanying the installation was a series of flyers and posters advertising the availability of the 'new rooms'. The sculpture tested architectural effects and ideas through an optical experiment. The flyers were distributed in neighbouring Broadway Market, a street whose modest corner shops and cafés have gradually been replaced by boutiques and real estate agents over the recent years, to direct prospective property buyers to the installed sculpture.



Tuomas Toivonen, in residence May–June 2008

New Rooms (NOW AVAILABLE)
Mixed media site-specific installation, postcards, posters







New Rooms ***at ambient.space, 5 June***
Photos: Mukul Patel and Manu Luksch



New Rooms (NOW AVAILABLE)
installed at ambient.space
(Tuomas Toivonen, 2008)
Photo: Mukul Patel



New Rooms (NOW AVAILABLE)
installed at ambient.space
(Tuomas Toivonen, 2008)
Photo: Tuomas Toivonen



Fahim Amir, in residence
June–July 2008

Drinking Theory – Grammar of the Metropolis – The End of Time and Space (As We Know It) – Against the Dictatorship of 'There's a Time and Place for Everything'
Posters, 'speaking installation', lecture-performance, sound work

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Performances by Fahim Amir at ambient.space (above) and Austrian Cultural Forum (right)

Fahim Amir: Drinking Theory – Grammar of the Metropolis – The End of Space and Time (As We Know It) – Against the Dictatorship of 'There's a Time and Place for Everything'

AMBIENT.VISTA ARTISTIC RESEARCH PAPER VERSION 2. 5:
THE END OF TIME AND SPACE (AS WE KNOW IT)

Thick speaking: speaking in hypertext modality.

In a Europe destroyed after WWII, a world of without place, a world without any spaces whatsoever, 'a new race of characters was stirring, a kind of mutant: they saw rather than acted; they were seers.'

Modest witness question:
Why did I decide to move to the Cyborg Market area? This is a very artistic and lively community to be part of. You meet a lot of talented and inspiring people when you go out and about. It's not very inspiring, though, that my friend was knocked off his bike with an iron bar. Some teenager now has the two teeth that he's missing.

Urban poor usually pay the highest rents relative to their living conditions. London's East End, the Victorian world's greatest slum: a vicious circle of housing demolition, rising rents, overcrowding, and disease. 'The really high profits were not made from investment in the housing boom in the suburbs, but the rack-renting boom in the inner area.' Slums like St. Giles, Whitechapel, and Bethnal Green attracted aristocratic investors whose 'expectation of high returns on foreign investment had been disappointed' as well as the frugal middle class for whom inner-city housing was 'the most popular and the most accessible means of capital gain.' Mega-slumlords like Thomas Flight (reputed to extract rent from more than 18,000 dwellings) had a lucrative stake in the immiseration of the East End. The same is true for Flight's counterparts in fin-de-siècle Naples, or rural landowning elites in the Third world transforming themselves into urban slumlords. In India, an estimated three-quarters of urban space is owned by six percent of urban households, and just 91 people control the majority of all vacant land in Mumbai/Bombay. In the inflationary environment of the 1980s, real estate became the highest-profit-sector. Smart money flowed into the booming market for converting slums into upscale apartment neighbourhoods in Istanbul.

What about trickster market?
I think it's tough for most creative people who want to stay independent and make what they believe in. I've been working seven days a week for almost three years, just to get to where I am now. It's especially tough at the moment because of the recession, and I don't want to look back and say what if? or, did I try hard enough?



Neudeutsch Chef-Duzen: Kaffe ist gratis, alle sind per Du, und Überstunden werden nicht bezahlt. The creative entrepreneur is on the one hand a neoliberal role-model: working collaboratively is a necessity, lifelong learning is a matter of course; disciplined and subjected to project-based labour, the contemporary artist paves the way for cutbacks in the social system. Since she is identifying herself in her social entirety with her job, paid overtime is a foreign word for contemporary creatives. The successful artist embodies neoliberal social skills of networking, flexibility and mobility. Be creative, be be creative! – 'Hang on! Is this a dinner or are we networking?'
My body my temple, my powernap, my retreat: fit for capitalism.

In the context of artistic and cultural work, the following conditions are most frequently mentioned as evidence of precarity:
1. project work and multiple job-holding;
2. a high level of formal education in combination with 'learning by doing';
3. low income and often little motivation to earn more;
4. close affective attachment to one's work;
5. overlap of work, private life, and leisure time: passionate work;
6. uncertain expectations for the future, including inability to even imagine one's future, deep insecurity with regard to future employment, and inability to plan reliably;
7. informality as a structural principle (network sociality, obligatory sociality), and clubs, pubs, friends and friends of friends as sources of new work opportunities;
8. new forms of self-discipline (as artistic individual, as entrepreneur) and the outsourcing of industrial control and safety mechanisms to the 'entrepreneur of his/her own labour';
9. long working hours associated with passionate/intensive work; extraordinarily high working time per week, no holidays;
10. a high degree of spatial, temporal, and social mobility;





11. alternating, frequently unforeseeable, phases of employment, unemployment, and permanent training.

Everything is changing so fast nowadays, but the centre can still hold. Just look at this area: city officials working with real estate developers, local landlords; rents are rising, but the wages won't. Hard to imagine my life in five, let alone 10 years.

I came to London in search of a part for my motorbike but ended up staying and getting into fashion design instead. After taking a few short courses I was accepted at the London College of Fashion and moved to Vampire Fields to be near the college.

I have lived and worked in the Cyborg Market area since moving from New Zealand. I bought a flat here eight years ago when the area was still affordable to buy in. That was a great move. The development of the area over the past five years has really helped me grow the business. Having a Cyborg Market address is really great as people know this street all over the world now.

But on the other hand, as a ideal potentiality the creative could be the transgressor per se, crossing territorial, topical and disciplinary borders:
We did some working class related politics the last years here around Cyborg Market – we even browbeat the Labour Party. If we had won seats on the Council, we would have founded an activist social centre here in the Leased End. We nearly did it.

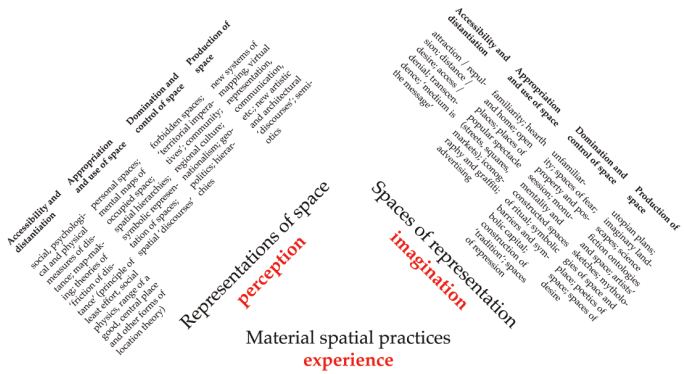
The classical bourgeois ideology treated space as the domain of the dead, the fixed, the undialectical, the immobile – a world of passivity and measurement rather than action and meaning. Accurate packages of such geographical information continued to be of use to the state, in the West and in the East, for military intelligence, economic planning, and imperial administration.

These three arenas of intelligence, planning, and administration defined an 'applied' geography, cementing a special relationship with the state that probably arose first in an earlier age of imperial exploration. The majority of the most prominent mid-century geographers in the United States of America were tied in one way or another with intelligence-gathering activities, especially through the Office of Strategic Services, the progenitor of the CIA.

Opposite & following two pages: Posters by Fahim Amir

'the annihilation of SPACE through TIME'





Material spatial practices

experience

Accessibility and distantiation	Appropriation and use of space	Domination and control of space	Production of space
flow of goods, money, people, labour power, information, etc.; transport and communications systems; market and urban hierarchies; agglomeration	land uses and built environments; social spaces and other 'turf' designations; social networks of communication and mutual aid	private property in land; state and administrative divisions of space; exclusive communities and neighbourhoods; exclusionary zoning and other forms of social control (policing and surveillance)	production of physical infrastructures (transport and communications); built environments; land clearance etc.); territorial organisation of social infrastructures (formal and informal)

1820s 1890s 1930s **1973**

'rigid' → 'flexible'

scale → scope

Fordism → post-Fordism

time-space compression

collective rhythms

spatial fix

•

'trente glorieuse'

mass production

mass consumption

half-life of a fordist product: five to seven years

under flexible accumulation: two to four years → fragmentation, ephemerality, discontinuity

A regime of accumulation 'describes the stabilisation over a long period of the allocation of net product between consumption and accumulation; it implies some correspondence between the transformation of both the conditions of production and the conditions of reproduction of wage earners. [...] A particular system of accumulation can exist because its schema of reproduction is coherent.' To keep the regime of accumulation functioning all participating individuals and political, cultural and economic agents have to be in some configuration: '...norms, habits, laws, regulating networks and so on that ensure the unity of the process; i.e. the appropriate consistency of individual behaviors with the schema of reproduction. This body of interiorized rules and social processes is called the mode of regulation.'

Lipietz, A. 'New tendencies in the international division of labour: regimes of accumulation and modes of regulation.' In A. Scott and M. Storper (eds), *Production, work, territory: the geographical anatomy of industrial capitalism*. London, 1986, p.19

Collage, though pioneered by the modernists, is a technique that postmodernism has very much made its own. The juxtaposition of diverse and seemingly incongruous elements can be fun and occasionally instructive. [...]

Down the left-hand side are ranged a series of intersecting terms to describe the condition of 'Fordist modernity,' while the right-hand column represents 'Flexible postmodernism.' The table suggests unambiguous associations. But it also indicates how two rather different regimes of accumulation and their associated modes of regulation (including the materializations of cultural habits, motivations, and styles of representation) might hang together, each as a distinctive and relatively coherent kind of social formation. Two reservations to that idea immediately come to mind. First, the oppositions, high-lighted for didactic purposes, are never so clear-cut, and the 'structure of feeling' in any society is always a synthetic moment somewhere between the two. Second, associations are no proof of historical causation or even of necessary or integral relations. Even if the associations look plausible – and many of them do – some other way has to be found to establish that they form a meaningful configuration.

The oppositions within each profile are noteworthy. Fordist modernity is far from homogeneous. There is much here that is about relative fixity and permanence – fixed capital in mass production, stable, standardized, and homogeneous markets, a fixed configuration of political-economic influence and power, easily identifiable authority and meta-theories, secure grounding in materiality and mechanical-scientific rationality, and the like. But all of this is ranged around a social and economic project of Becoming, of growth and transformation of social relations, of auratic art and originality, of renewal and avant-gardism. Postmodernist flexibility, on the other hand, is dominated by fiction, fantasy, the immaterial (particularly of money), fictitious capital, images, ephemerality, chance, and flexibility in production techniques, labour markets and consumption niches; yet it also embodies strong commitments to Being and place, a penchant for charismatic politics, concerns for ontology, and the stable institutions favoured by neo-conservatism. Habermas's judgement that the value placed on the transitory and the ephemeral 'discloses a longing for an undefiled, immaculate and stable present' is everywhere in evidence. It seems as if postmodernist flexibility merely reverses the dominant order to be found in Fordist modernity. The latter achieved relative stability in its political-economic apparatus in order to produce strong social and material change, whereas the former has been dogged by disruptive instability in its political-economic apparatus, but sought compensation in stable places of being and in charismatic geopolitics.

But what if the table as a whole itself constitutes a structural description of the totality of political-economic and cultural-ideological relations within capitalism? To view it this way requires that we see the oppositions across as well as within the profiles as internal relations within a structured whole. That idea, outrageous by postmodernism's own standards (because it resurrects the ghost of Marxist thinkers like Lukacs and appeals to a theory of internal relations of the sort that Bertell Ollman advances) makes more than a little sense. It helps explain how it is that Marx's *Capital* is so rich in insights into what the current status of thinking is all about. It also helps us understand how the cultural forces at work in, say, fin de siecle Vienna constituted such a complex mix that it is almost impossible to tell where the modernist impulse begins or ends. It helps us dissolve the categories of both modernism and postmodernism into a complex of oppositions expressive of the cultural contradictions of capitalism. We then get to see the nature of both modernism and postmodernism as static reifications imposed upon the fluid interpenetration of both tendencies. Within this matrix of internal relations, there is never one fixed configuration, but a swaying back and forth between centralization and decentralization, between authority and deconstruction, between hierarchy and anarchy, between permanence and flexibility, between the detail and the social division of labour (to list but a few of the many oppositions that can be identified). The sharp categorical distinction between modernism and postmodernism disappears, to be replaced by an examination of the flux of internal relations within capitalism as a whole.

David Harvey, *The Condition of Postmodernity* (Oxford: Blackwell, 1990), pp. 338-342.

FORDIST MODERNISM VERSUS FLEXIBLE POSTMODERNISM, OR THE INTERPENETRATION OF OPPOSED TENDENCIES IN CAPITALISM AS A WHOLE

This is a project of urban geography as artistic research. The analysis of the spatiotemporal fixes focuses on processes of deterritorialisation, reterritorialisation and subjectification. Temporalities as war machines.

Baghdad and its slum Sadr City. Mind the urban gap! Future wars will take place in slums, where guerrilla tactics from dead Maoism could have a zombie-life on new urban battlefields. The price of urban warfare: after WWII, an inversion of norms. The civilian to military casualty ratio is now roughly 8:1.

Military geographers and warfare in the first century of the third millennium. The dark side is preparing. A revolution in military affairs, the cybernetic battle system for urban war, is a reaction to the 'universalization of information technology' and 'the efflorescence of capitalism'.

Walking through walls with Deleuze. Be part of the swarm talk. MOUT: military operations in urban terrain are nomadological. In these assaults, troops eschew traditional lines of advance – the alleys and streets of refugee camps – and burrow through buildings instead. MOUTs invert figure-ground relations in architecture. Military strategists use reversed city plans – where voids are treated as solids and solids as voids. Reverse your tactical assumptions to subvert the logic of an insurgency.

'Language is a skin: I rub my language against the other. It is as if I had words instead of fingers, or fingers at the tips of my words.'

Agoraphobia and claustrophobia first appear three decades before the start of the twentieth century. Agoraphobia and claustrophobia: the yin-yang of spatial thinking in the modernist period. What comes now?

The passionate intensity of the urban arcades PLUS the chancy promiscuity of the urban stranger EQUALS a poetry of the pavement.

Koolhaas calls it 'junk space'.
Maximum velocity. Smart bomb.

'It is not we who make cinema; it is the world which looks to us like a bad film.'

Strategic Low-income Urban Management

– micro-credits
– informal petty bourgeoisie *vs* informal proletariat
– gambling, pyramid schemes & lotteries
– little witches
– kidney farms
– Pentecostal

Postmodern Haussmann

– human encumberments
– transients in a perpetual state of relocation
– the horrors of 'urban BEAUTIFICATION': Olympics, Summits, Visits
– counterinsurgeny
– criminalisation
– *Bladerunner*'s 'off worlds' & architectures of fear
– fundamental reorganisation of metropolitan space

Baby-killers living in shit

– risks = hazards × assets × fragility
– 'classquake'
– hot demolition
– 'flying coffins' and 'flying toilets'
– interface of underdevelopment and industrialisation

post-Maoist guerrilla



Urban poverty's big bang: IMF 1974-75

– squatters as urban pioneers
– human dump
– *Groupe CIAM Alger* and the bidonville
– NGO-imperialism & globalisation from below
– slumlords: from Bethnal Green to Dharavi

Mike Davis, *Planet of Slums* (London: Verso, 2006)

Any composition is a mixture (melange) of smooth and striated space. The major task of micropolitics: mapping different kinds of space, analyse that mix in each assemblage (social, political, geological, biological, economic, aesthetic, musical).

Politics of non-identity. Reinheit ist der schlechte Fusel der Seele. Cyborgs, parasites and symbionts: living together in the New Urban Order. If chimpanzees and dogs have politics, why can't we?

'I use *Mixotricha Paradoxa* as an entity that interrogates individuality and collectivity at the same time. It is a microscopic single-celled organism that lives in the hindgut of the South Australian termite.

'What counts as "it" is complicated because it lives in obligatory symbiosis with five other kinds of entities. Each has a taxonomic name, and each is closely related to bacteria because they don't have a cell nucleus. They have nucleic acid, they have DNA, but it's not organized into a nucleus.

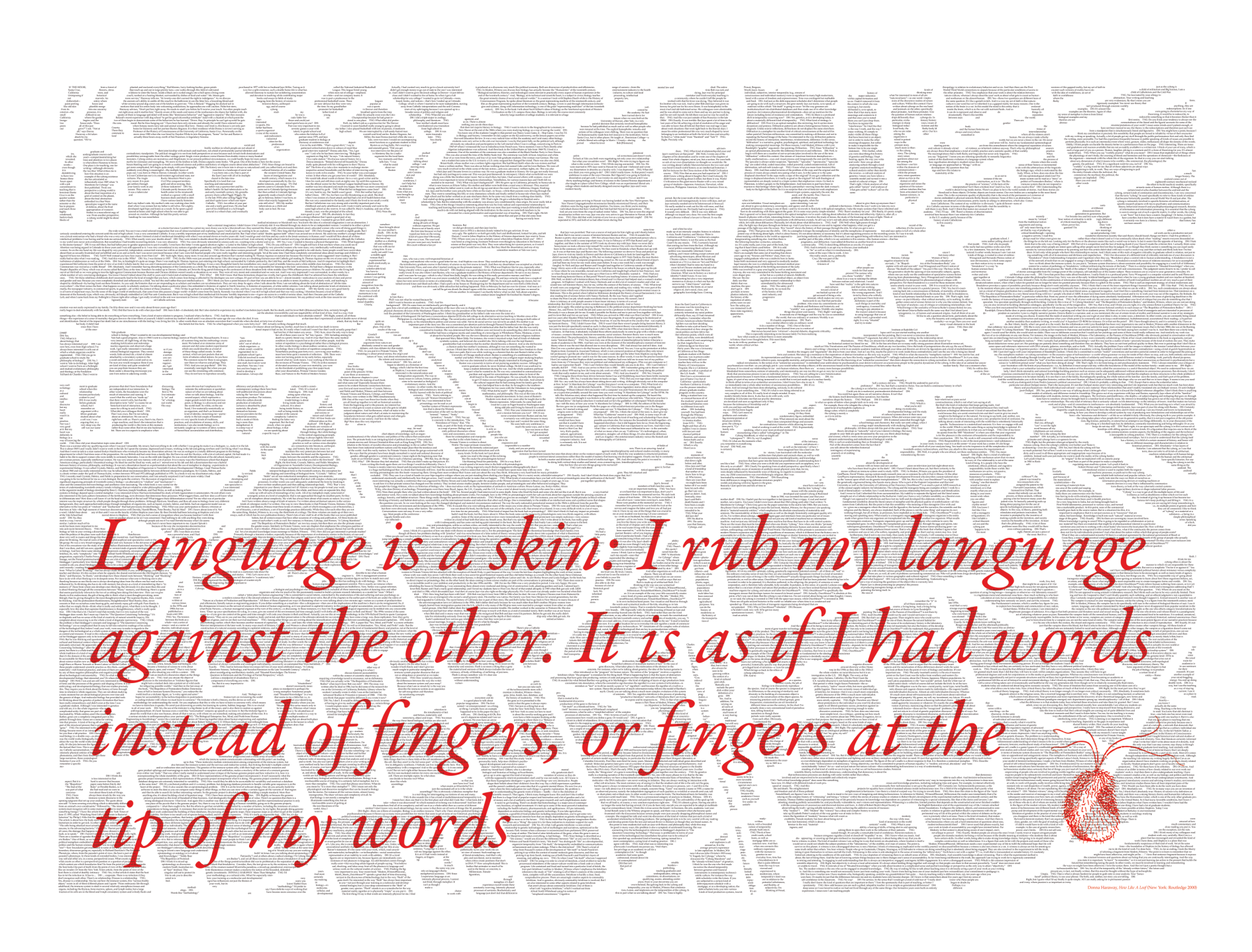
'Each of these five different kinds of things live in or on a different region of the cell. For example, one lives in the interdigitations on the exterior surface of the cell membrane. So you see these little things that live in these folds of the cell membrane, and others that live inside the cell. But they aren't in the full sense part of the cell. They live in obligatory symbiosis. Nobody can live independently here. This is codependency with a vengeance! And so the question is – is it one entity or is it six? But six isn't right either because there are about a million of the five non-nucleated entities for every one nucleated cell. There are multiple copies. So when does one decide to become two? When does this whole assemblage divide so that you have, now, two? And what counts as *Mixotricha*? Is it just the nucleated cell or is it the whole assemblage?'

Mixotricha means mixed threads. This is obviously a great metaphor, that is a real thing, for interrogating our notions of one and many.

Biology is an endless resource. Prefer it to psychoanalysis!

End of manuscript.

I want to thank the Cultural Academy research group (London/Vienna) where some of the ideas of the manuscript were first discussed. All intellectual labour is social.



Donna Haraway, *How Like A Leaf* (New York: Routledge 2000)



Shiho Fukuhara, in residence October 2008

Parts Unknown
Plastic work, text, single-screen video work, photographic prints.

Thanks to Rachel Baker for reading the voiceover text for the video.

Shiho Fukuhara: Parts Unknown

VOICEOVER TEXT FOR VIDEO WORK

In the middle of the Pacific Ocean, between Hawaii and Japan, there is a new and independent country. A country without beaches, without mountains, without rivers, without soil, without ground. A country without land.

This country is made from floating islands. Only a few humans have heard of it. Even fewer have dared to journey to the island and set foot on-shore. And no explorer has yet planted a flag to claim this country.

It is a country without a name. A new white spot on the map. A new Atlantis, rising from the waters in front of our very eyes.

But this country is not foreign to us. This is not a strange place, floating just beneath the surface of our consciousness. It is the by-product of our global metabolism, a manifestation of our common culture, the results of our collective consumption.

It is – plastic.

Plastic – like the wrappers of your sweets.
Plastic – like the bottle you drink your water from.
Plastic – like the toys your children play with.
Plastic – like the housing of your computer.
Plastic – like the bags from your last shopping.
Plastic – like the shell of your mobile phone.
Plastic disposed over the last 50 years, since the dawn of the plastic age. A primordial plastic ocean, a perfect mixture of accumulated plastic garbage and the steady influx of new arrivals. A post-mordial soup of post-mortem consumption.

The dimensions of this plastic country are massive, and it is getting bigger every day. Every time a plastic package is bought, every time a plastic package is dumped, it contributes to the growth of the island. Now, it is already twice the size of the US, but still it is growing, still it is gaining weight, still it is gaining strength. Driven by the currents of the Pacific and trapped in its gyre, it keeps on developing, it keeps on revolving, it keeps the vortex moving.

And it is has a cloak of invisibility, it does not want to cast a shadow. It does not want to show itself yet, it prefers to stay

hidden for the moment. It keeps itself just below the water surface, so that satellite images fool us into believing in a clear, blue, untouched Pacific Ocean, while the island slowly and patiently prepares to rise up.

Once it appears on the ocean surface, the heat of the sun softens the plastic and melts it down. This meltdown gives rise to fumes, to ether-like structures, to ghosts.

They will exist inside us. Each one of us will become in some part plastic. We will become plastic people. Large pieces of plastic are broken down into microscopic particles. Micro-granular plastic is mistaken by fish, crustaceans and other sea creatures for food. But the consequences are dire. The plastic clogs their bloodstream and kills them in the most gruesome way. It replaces the building materials of their bodies. How long until nano-plastic particles are replacing the building materials of our bodies?

The island itself is like a living entity, 'it moves around like a big animal without a leash'. It is unleashed and Big. It is big and fearless. It bites and barks. And when it barks, 'it spits its guts over real beaches of real island, leaving a deadly confetti of shredded plastic in its wake'.

Immigrants are secretly travelling to this unknown country. They don't need money for the ticket, they don't need passports for border control. They are expelled from their countries of origin, but they are going to find a new place to call home. They become part of this melting pot, their brands and logos slowly fading away, their memories getting bleached by the sun. Their one-way journey might be over, but their mission is only starting. They are the foundations of a new habitat, a habitat of eternal plastic, revolving only around itself. A plastic time-capsule with all the time in the world.

They carry small maritime species collected along their journey with them. Species not supposed to belong together. Bioremixing to create lifeforms yet unknown.

A new nation is being built. The process of construction is underway. New flags will be flown across its acres, new hymns will be whistled by the passing winds, new stories of origin will be heard and told. A new nature made from cultures past. A new polymer nature from the global consumer monoculture.



Above & right: Parts Unknown
Photographic prints
(Shiho Fukuhara, 2008)



A long journey is coming to an end.

After millions of years of transforming from organic matter into oil...
After decades of being drilled and probed and pumped and refined, shipped, refined again, transfomed and moulded into form...
After decades of being filled, wrapped around, stacked, carried, worn, kicked, taking on logos and marks...
After years of being shipped from one place to the next, from one country to the other...
... the ghosts are freed from the burden of attention, freed from the agony of consumption. Hollowed out, emptied of the substances and goods that were made in their ideal image. Ghosts whispering of the desires and wishes and vanities they once were signs for. After-echoes, vanishing in the distance, taking with them their meaning. Leaving behind pureness. Nothing to prove, nothing to lose, everything to be.

All rivers flow into the sea. Canals, like veins, transport the used and exhausted material forward to the source, back to the origin. An arduous journey, many miles long, many seas wide, many storms deep. Blood is flowing back to the heart and send out again, refreshed, rejuvenated, new. Plastic is flowing into a heart of darkness, no escape, no way out. Terminal. End.

Start. Beginning. Emergence as something else. No longer product, no longer object of consumption. Form without Structure, shape without meaning. Ready to be a part of a new country, a new commonwealth, a new union.

The new Atlantis.



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1
Plastic garbage in Regent's Canal
Photo: Manu Luksch

2
Boat with wireless camera used to film Parts Unknown
Photo: Mukul Patel

3
Parts Unknown *video and plastic works installed at E:vent Gallery's* The Beautiful Children *show, V22 Wharf Road Project, October 2008*
Photo: Mukul Patel

Mukul Patel
2004

Public sound art and choreography for portable tape/CD players; site-specific sound work and choreography for Trafalgar Square

D.I.S.C. was commissioned by Århus Festuge for the *Streets of Asia* festival; *England Expects... (Nelson- not -Nelson)* was commissioned by Greenwch & Docklands Festival for *Square Perspectives*, 2004.

www.ssshhhhh.dk/ghettoblast.htm

WORKS FOR GHETTOBLASTERS

The eight-piece Danish Ghettoblaster Ensemble is a mobile sound art unit that performs works in public space. In 2003 the Ghettoblaster Ensemble performed my *Diaspora.In.Synchro.City* (*D.I.S.C.*) as part of Århus Festuge. *D.I.S.C.* maps parts of contemporary Bombay onto the performance space. Performers arrive by train and move through four locations (railway platform, station forecourt, marketplace, a city square) before departing again. Based on manipulated field recordings, the ghettoblasters G1–G8 take on individual characters, including a radio announcer, a taxi driver, a b-boy and a street hawker. *D.I.S.C.* is designed for seven playback machines and one recorder – and so documents its own performance – but was adapted for the CD playback-only machines of the Ghettoblaster Ensemble. The 15-minute work is given in the form of CDs or tapes with multiple tracks, scores (and frameworks for improvisation) for each ghettoblaster, a cue sheet for the conductor, and choreographic notes.

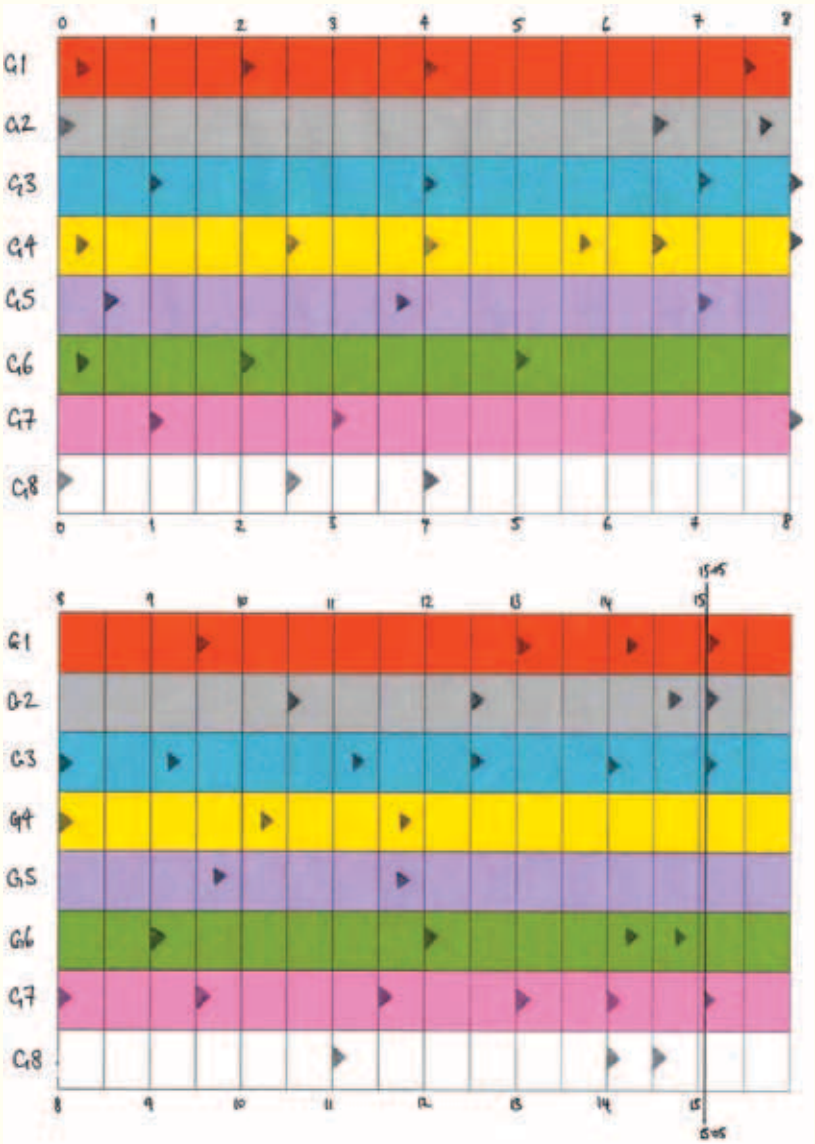
England Expects... (Nelson- not -Nelson)

In 2004, I invited the Ghettoblaster Ensemble to perform a new work, *England Expects... (Nelson- not -Nelson)* in Trafalgar Square for the Square Perspectives 2004 festival. Arranged for seven ghettoblasters and a megaphone, the 10-minute work anticipates by a year the bicentennial of the Battle of Trafalgar, and is a witness to the history of the square and its environs (Admiralty Arch, South Africa House, and St. Martin-in-the-Fields).

England Expects... is based on field recordings and samples including speeches by Nelson Mandela on his release; reports from the bombing of Trafalgar Square during World War II, from the Falklands/Malvinas War, and from the bombing of Baghdad in 2003; recordings of anti-capitalism demonstrations in the Square on June 18th 1999 and on May Day 2000 and anti-war demos in London and Cairo in 2003; and a recording of a stuntman's parachute leap from the top of Nelson's Column to raise awarness for Act for Tibet. Beginning with and punctuated by megaphone announcements ('England expects...'), the work concludes with a toppling of statues – of Saddam Hussein

(during the 'liberation' of Baghdad), of Bush (during the 15th February protest against the war), and of Admiral Nelson (during the performance, ideally). The performers are choreographed in a narrative that begins with a triumphal march down the steps from the National Gallery, circles around the fountains to cascade down the steps again in a struggle between police and demonstrators, points to South Africa House and the sites of WWII bombardment, follows the trajectory of the parachuting protester, and finally, using maximum volume, topples Nelson off his column.

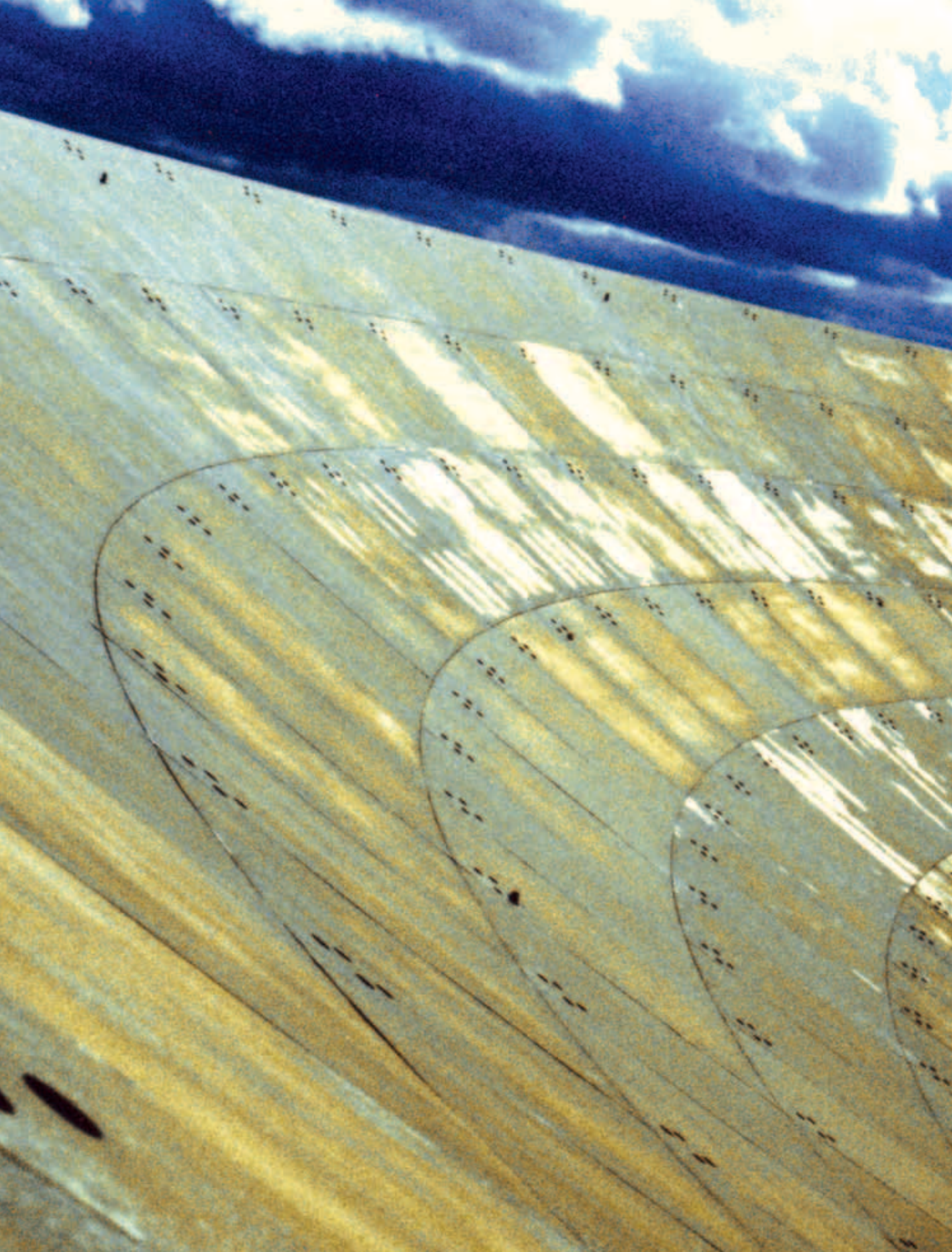




Above: Conductor Ture Larsen and megaphone operator Michael Uwemedimo in Trafalgar Square, July 2004
Photo: Anthony Auerbach

Left: Conductor's cue sheet for D.I.S.C.

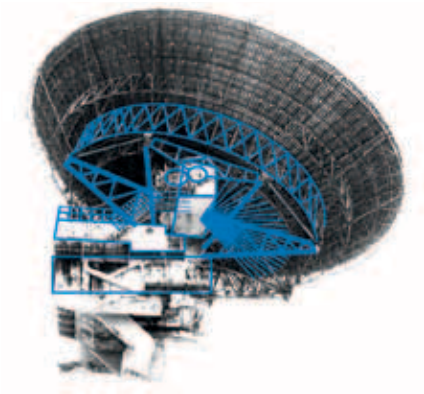
6/SCAN – JAM – HIJACK





Mukul Patel
2001

First published in *WIRE* magazine, September 2001.
http://acoustic.space.re-lab.net



[1] Riga Center of New Media Culture
http://rixc.lv

[2] As part of a ship-to-shore conversation to communicate a telephone number (0499 706090). I used the spoken digits as percussive elements to make *renumber*, an attempt at a systems music, but missed the opportunity to call the number and play back the track to complete the loop.

Previous page: RT-32
Photo: Mukul Patel

Above: RT-32
Graphic: Paul Khera

ACOUSTIC.SPY.LAB

When the invasion of a precision scientific laboratory by assorted media artists quadruples the available computing power, one can forgive a rush of optimism about a possible dialogue between science and art.

Seven years after the withdrawal of the Soviet Army, a 32m diameter radiotelescope in the Irbene forest near Ventspils (an oil transit port in western Latvia) was occupied once more – this time, by a 35-strong army wielding laptops, camcorders, scanners, kilometres of cable, crates full of jacks and plugs, and enough theory to confound the observatory physicists. Organised by Rasa Smite and Raitis Smits, co-founders of E-Lab/RIXC[1], and Derek Holzer, the *acoustic.space.lab* symposium took place from 4th–12th August between the Ventspils International Radio Astronomy Center (VIRAC) and RIXC. Media artists and activists gathered to explore the interface of art and communications technologies, and to launch an International Acoustic Space Research Programme. Participants who travelled for the opportunity to slide around the dish included L'audible, RadioQualia, Sara Kolster, Robert Adrian X, Radio 90, Siksika Media, Digibodies, Irational, Makrolab, Clausthome, rigasound.org and ambientTV.NET.

In 1993, the Soviet Army withdrew from the Baltic States, revealing the existence of an espionage centre near Ventspils used to eavesdrop on Western satellite communications. Of the three antennae at the site, the Soviets took the smallest dish, but the 16 m and 32 m dishes were too large to move. Under pressure from the international radioastronomy community, the army held off from blowing up RT-16 and RT-32, instead gifting them to the Latvian government. A handover team did, however, 'prepare' the dishes, throwing metal debris into the mechanics, driving nails through cables, and pouring acid into the electronics. Thankfully, the antennae were built like ships – having been drastically over-engineered by the Soviet Navy. So, despite only nominal support from the Latvian government – VIRAC is classed a 'Scientific Company with Limited Responsibility' – enthusiasts from various Latvian scientific institutes determined the properties of the antennae, repaired the damage, and transformed them into operational radiotelescopes.

The larger antenna, RT-32 ('Little Star'), is remarkably precise – through all the manoeuverings of the 600-tonne structure, the dish distorts less than 0.5 mm from its paraboloidal ideal. With the installed feed horn tuned to 11 GHz (2.5 cm wavelength), RT-32 has been used to detect radiation from the planets and the Moon (some of which is due to lunarquakes), the Sun and other stars, and extragalactic sources including possible black holes. It has also been used for VLBI (Very Long Baseline Interferometry), in which widely separated telescopes are coupled to form a giant antenna of a size equivalent to the distance between them. But lack of funds to repair leaks in the labs and upgrade the toilet facilities from the Soviet-era wooden hut means that RT-32 is not overrun by astronomers – leaving it open for takeover by a bunch of media vagabonds. (In true festival spirit, we brought in a green portaloo).

acoustic.space.lab set up three working groups at RT-32 under the guidance of Dimo (Dmitrijs Bezrukov). Dimo deals with all aspects of the telescope – electromechanical, software, making of observations – and is also, if needed, guard, cook, and driver. He was trusting enough to allow us unlimited access, and assisted with all types of reception, but ruled out transmission (since noone had produced the requisite licence).

RT-32 is mounted on a 25 m concrete tower. Just under the dish is the 'submarine' room, complete with portholes and a 15 m conning tower that gives access to the dish surface, the feed horn at the secondary focus, and – after a shaky climb up the supporting lattice – the small reflector at the primary focus. Three groups established residency in various parts of the superstructure. The spy group, led by Makrolab, mounted their own L-band (1.5 GHz) feed at the secondary focus. True to the dish's original purpose, they eavesdropped on communications satellites. Analogue channels on an Inmarsat yielded familial chatterings in Malayalam[2] and a minor drama about a South African stowaway, which rapidly turned into a bureaucratic wrangle. In the spirit of their earlier webstreaming/feedback experiments, ambientTV.NET hoped to place a call and route it via one of these channels, intercept it and then feed it back, but logistically this proved impossible.

Fuelled by borscht and Black Balsam (the other black gold of the Baltics), the acoustic group scaled the dish and rigged up microphones at the primary and secondary foci. Dimo lowered the dish to zero elevation and scanned the horizon. Above the wind noise, the mikes picked up rustlings from the



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1
The spy group at work

2
Dimo atop RT-32

3
The acoustic group
Photos: from the project's common data pool, except 2 by Mukul Patel

Irbene forest, occasional bird cries, conversations on the ground, and a screeching handbrake turn. Movement of the dish also generated spectacular sinusoidal groans and squeaks, consonant in thirds and accompanied by excited squeals from the submariners.

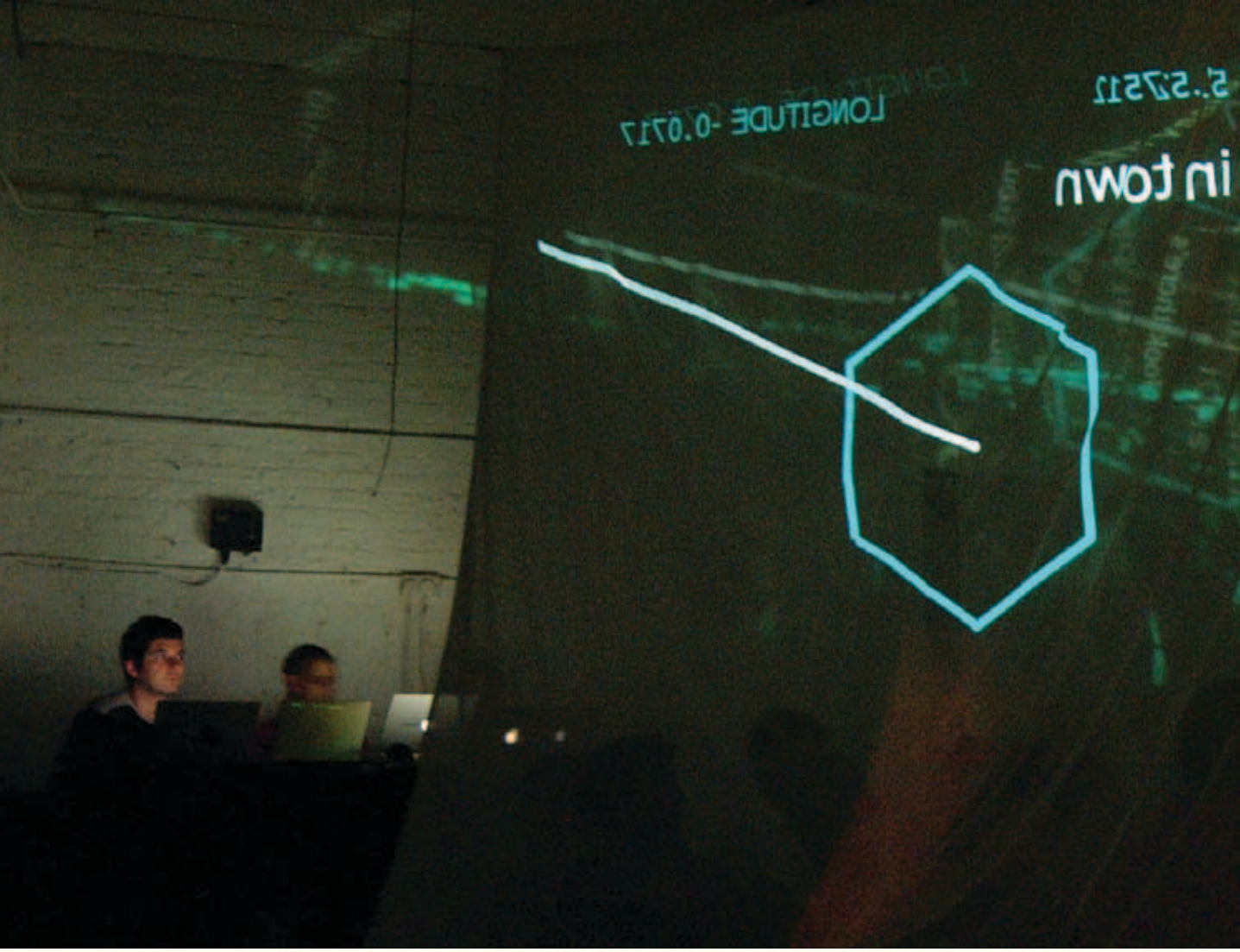
The radioastronomy group attempted to observe Venus, Jupiter, and the Sun. With only a few hours' observation, it proved difficult to isolate any planetary signals amongst the noise, but data from the solar scans was passed through Java applets and translated into MIDI by Zina Kaye (L'audible). Attempts to step down the GHz frequencies into the audible range yielded, predictably, more noise – but this was food enough for Clausthome, who spent hours manipulating it into a warm, dense industrial soundscape. Back in Riga, the material gathered and processed during the four days at the telescope was webcast in a 6-hour programme from the LMS *Galerija* with remote participation from Kunstradio[3].

[3] archived at http://ozone.re-lab.net/live.ram

So, 'science and art': one massive dish in hand, and we didn't cook up anything approaching what Alvin Lucier did with a couple of tape recorders. There was no space for significant dialogue between scientists and artists. But we hope to use *acoustic.space.lab* as a launchpad for deeper, more theoretically and technically informed collaboration. The fact that much of what is observed is very distant not only in space but also in time, the reflexive nature of VLBI measurements being used for geodesy – these are departure points for more specific and substantial projects. At the close of the symposium, VIRAC director Edgars Bervalds expressed his delight that the antenna had been explored in so many ways, adding that, though the antenna ought to be used primarily for science, 'artists can use it to fill the vast spaces in our Universe that science cannot reach.'

"I want to give you the three phases of art as I know it. There was a time when people were interested in the bronze sheath of the Statue of Liberty [...] And then there came a time when artists [...] were interested in Eiffel's iron interior structure, supporting the statue. Now artists are interested in Bedloe's island [the site of the Statue]."

Carl Andre on New York radio station WBAI-FM, 8 March 1970 in a symposium moderated by Lucy R. Lippard. Quoted by Hal Foster, 'Why all the hoopla?' in London Review of Books, *23 August 2001.*



Above and following two pages: Myriorama *at Project Market, Quaker Street, London, August 2004*
Photos: Anthony Auerbach

1
The tent

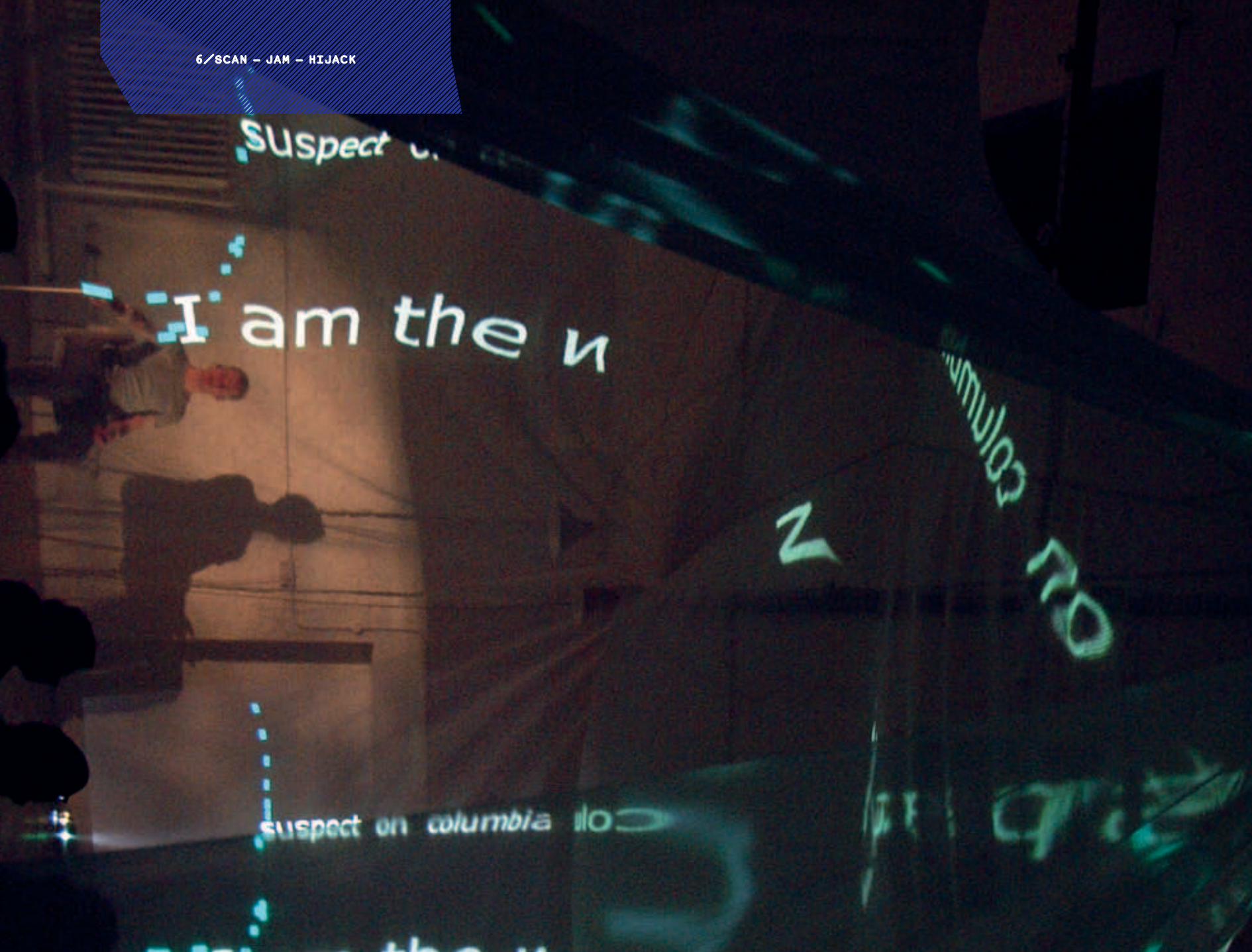
2
Entrance lounge

3
The Roamer
Photos: Gavin Starks

1

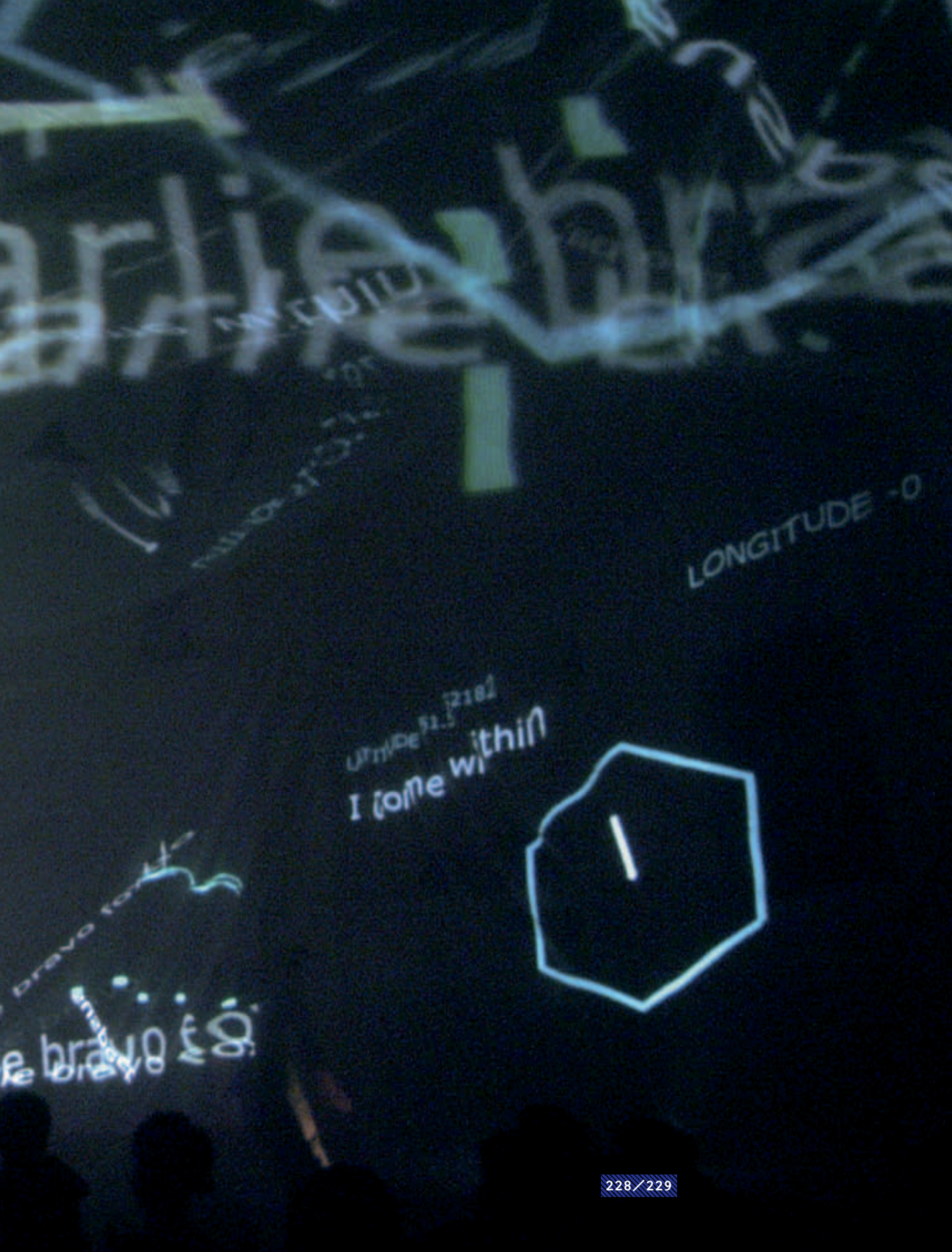
2

3


I am the
suspect on columbia

I am the
a kid comes out of a


I come wit


LONGITUDE -0
I come within

Manu Luksch & Mukul Patel
Summer 2004

In conversation with
Anthony Auerbach.
AA = Anthony Auerbach
MP = Mukul Patel
ML = Manu Luksch

Myriorama was a collaboration with kondition pluriel (Martin Kusch & Marie-Claude Poulin with Martin Bélanger). Additional contributions: Anthony Auerbach, Alexandre Burton, Mo-Ling Chui, Camalo Gaskin, David Muth, Shane Solanki, Gavin Starks, Thomas Willomitzer; roamers: Diana Baldon, Lottie Child, Equal-I, Pete Gomes, Niki Gomez, John Hopkins, Christian Nold, T. J. Rehmi, Shane Solanki

The narrative and technical framework for *Myriorama* was developed through a series of works-in-progress: *flipflop*, *TRyPTiCHON 1.0* and *TRyPTiCHON 2.0*. *flipflop* featured a character that had two bodies: the present one inside the venue, and his past/future persona outside the venue. Conceptual and technical investigations involved audio/video streaming over wireless networks, real-time audio/video manipulation, and

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MYRIORAMA

Once upon a time...

...in the kingdom of Myriorama, there ruled a king who knew the art of reading and bending the thoughts of his people over great distances, which rendered him famously powerful. One day, a wanderer enters the kingdom...

AA – Is *Myriorama* a new departure for you, or do you see it as a convergence of the various activities you've been involved in?

MP – *Myriorama* deals with movement in live data architectures, with spatial narration and serendipitous street encounters, with facts and fictions, the local and the global, empowerment versus surveillance. Technically, it uses various position- and motion-tracking and data communication and manipulation technologies: satellite-based Global Positioning System (GPS), cellphone networks, the Internet, and, inside the venue, a motion sensor system and the Max/MSP/Jitter programming environment.

ML – Some years ago, we experimented with the possibility of happenings at a distance with the *Telejams*. There, we linked up parties in different cities with online streams (and fed sound and images back and forth between them). But we've also worked with networks and data flows in other contexts. For me, a key moment was June 18, 1999 – the global 'Carnival against Capitalism', in which protests around the world were linked through live online reports and streams. I filmed on London's streets and biked tapes over to media lab Backspace for immediate upload.

MP – Expansion of the performance space through live data links is one important aspect of *Myriorama*. And my experience as writer, sound artist and composer for contemporary dance companies feeds the narrative, sonic and choreographic facets. But there are also new departures. We've only recently started working with responsive environments – live video/sound manipulation systems that can be controlled by inputs such as environmental data, or a dancer's movements. So there are many strands, old and new, coming together. At a stage the









Roamer data (by Equal-I)

1, GPRMC 112800.5625 A 51.535366 N -0.061243 W 0.49 280.07 10804 0 0 I am home;
2, GPRMC 112923.5625 A 51.535442 N -0.062445 W 0. 208.9 10804 0 0 scary waters;
3, GPRMC 113137.554688 A 51.534863 N -0.06311 W 0. 347.33 10804 0 0 coconut dish smell;
4, GPRMC 113815.53125 A 51.5312 N -0.066843 W 1.09 264.69 10804 0 0 so there's the farm;
5, GPRMC 114226.515625 A 51.52964 N -0.068888 W 0.4 197.85 10804 0 0 entering flower frenzy;
6, GPRMC 115509.46875 A 51.528355 N -0.070833 W 0.82 169.19 10804 0 0 back on the map;
7, GPRMC 121347.398438 A 51.523624 N -0.071317 W 1.64 119.71 10804 0 0 hyperventilating dog again;
8, GPRMC 130220.90625 A 51.53471 N -0.063318 W 0.33 159.87 280704 0 1 inside a dark pub;
9, GPRMC 130540.898438 A 51.533585 N -0.064607 W 1.51 210.29 280704 0 1 a kid comes out of a block...;
10, GPRMC 132116.921875 A 51.535995 N -0.060468 W 3.45 357.91 180704 0 1 flared nostrils;
11, GPRMC 132328.46875 A 51.532635 N -0.067217 W 0. 0. 280704 0 1 crickets buzzing;
12, GPRMC 132331.921875 A 51.535244 N -0.061688 W 1.78 337.23 180704 0 4 vox pops;
13, GPRMC 132336.46875 A 51.532608 N -0.067205 W 1.04 250.19 280704 0 1 lambs bleating;
14, GPRMC 132633.453125 A 51.531452 N -0.066757 W 3.27 134.82 280704 0 1 ducks quacking;
15, GPRMC 132644.453125 A 51.531704 N -0.06744 W 0. 166.64 280704 0 1 a black bird rustles;
16, GPRMC 132651.453125 A 51.531738 N -0.067522 W 0.39 211.66 280704 0 1 in the dead leaves;
17, GPRMC 132808.453125 A 51.531162 N -0.067173 W 0.58 349.63 280704 0 1 massive truck reversing;
18, GPRMC 132815.453125 A 51.531151 N -0.06718 W 0. 11.3 280704 0 1 makes beeping noises;
19, GPRMC 132823.453125 A 51.531128 N -0.067222 W 2.11 180.47 280704 0 1 and manu does too;
20, GPRMC 132926.4375 A 51.530598 N -0.066585 W 2.3 175.19 280704 0 1 two men;
21, GPRMC 133004.4375 A 51.530224 N -0.066482 W 1.75 155.26 280704 0 1 sitting on a park bench;
22, GPRMC 133012.4375 A 51.530144 N -0.066488 W 2.78 202.47 280704 0 1 laughing;
23, GPRMC 133102.4375 A 51.53 N -0.067235 W 2.51 260.04 280704 0 1 my flip flops flapping;
24, GPRMC 133217.6875 A 51.536556 N -0.061903 W 0. 0. 180704 0 1 holistic health;
25, GPRMC 133221.4375 A 51.529743 N -0.068782 W 2.07 207.52 280704 0 1 small boy;
26, GPRMC 133227.4375 A 51.529697 N -0.068817 W 2.22 207.44 280704 0 1 walks out of newsagent;
27, GPRMC 133234.4375 A 51.529648 N -0.068873 W 2.05 207.36 280704 0 1 change rattles;
28, GPRMC 133332.421875 A 51.529224 N -0.069647 W 2.02 216.91 280704 0 1 in his pocket;
29, GPRMC 133715.421875 A 51.528709 N -0.070395 W 0. 184.88 280704 0 1 as she sprints ahead of me;
30, GPRMC 133722.9375 A 51.534691 N -0.060315 W 0. 0. 210704 0 0 equal-i;
31, GPRMC 133732.65625 A 51.534439 N -0.063462 W 2.07 221.86 180704 0 4 whistling girl;
32, GPRMC 133737.9375 A 51.534554 N -0.060468 W 0. 0. 210704 0 0 the equal eye;
33, GPRMC 133923.40625 A 51.528214 N -0.0715 W 0. 91.75 280704 0 0 talking about hair;
34, GPRMC 133929.40625 A 51.528221 N -0.071497 W 1.52 262.2 280704 0 0 at that in-between stage;
35, GPRMC 134045.40625 A 51.527905 N -0.072313 W 0. 96.87 280704 0 0 toddler moaning at his mum;
36, GPRMC 134051.40625 A 51.527897 N -0.072328 W 1.32 232.85 280704 0 0 who's pushing a pram;
37, GPRMC 134101.40625 A 51.527782 N -0.072507 W 1.92 215.77 280704 0 0 heavy with shopping bags;
38, GPRMC 134143.40625 A 51.527637 N -0.073153 W 2.1 272.18 280704 0 0 a crow;
39, GPRMC 134151.40625 A 51.527573 N -0.073265 W 2.92 164.86 280704 0 0 making really loud caw caw;
40, GPRMC 134245.640625 A 51.532055 N -0.065962 W 1.04 308.87 180704 0 0 panting man now;
41, GPRMC 134342.640625 A 51.532047 N -0.065818 W 0. 272.78 180704 0 0 ball falling out of van;
42, GPRMC 134415.390625 A 51.526497 N -0.072565 W 2.56 159.67 280704 0 0 water trickling;
43, GPRMC 134422.390625 A 51.526409 N -0.072473 W 3.02 153.5 280704 0 0 in the magic well;
44, GPRMC 134433.390625 A 51.526268 N -0.072372 W 2.86 152.15 280704 0 0 in the front garden;
45, GPRMC 134440.390625 A 51.526196 N -0.072307 W 2.79 157.27 280704 0 0 of a shaman horticulturalist;
46, GPRMC 134509.640625 A 51.532005 N -0.065903 W 0. 330.85 180704 0 0 we now have line dancing;
47, GPRMC 134629.390625 A 51.52499 N -0.07184 W 1.02 171.02 280704 0 0 lone basketball player;
48, GPRMC 134636.375 A 51.524937 N -0.071832 W 1.11 119.16 280704 0 0 bup;
49, GPRMC 134647.375 A 51.524879 N -0.071848 W 0.46 249.52 280704 0 0 bup;
50, GPRMC 134653.375 A 51.524868 N -0.07183 W 0. 146.18 280704 0 0 bup;
51, GPRMC 134654.625 A 51.531601 N -0.066148 W 2.47 198.89 180704 0 0 soft warm laughter;
52, GPRMC 134700.96875 A 51.535236 N -0.062632 W 2.92 205.93 210704 0 0 this is a test;
53, GPRMC 134714.625 A 51.531422 N -0.066342 W 1.94 229.13 180704 0 0 wooden it be nice;
54, GPRMC 134749.375 A 51.524277 N -0.07165 W 1.35 152.86 280704 0 0 fridge buzzes;
55, GPRMC 134756.375 A 51.524212 N -0.07162 W 1.53 164.77 280704 0 0 in a coffee shop;
56, GPRMC 134848.375 A 51.523788 N -0.07145 W 0.31 356.9 280704 0 0 radios blend;
57, GPRMC 134933.96875 A 51.534222 N -0.063903 W 1.88 249.21 210704 0 0 to change the system;
58, GPRMC 135015.375 A 51.52346 N -0.071483 W 1.55 185.37 280704 0 0 into each other;
59, GPRMC 135024.375 A 51.52343 N -0.071512 W 2.05 174.37 280704 0 0 sitting outside a cafe says;
60, GPRMC 135030.375 A 51.523373 N -0.071478 W 2.32 136.49 280704 0 0 "all of a sudden outside the classroom...";
61, GPRMC 135048.375 A 51.523201 N -0.071557 W 2.86 194.86 280704 0 0 she doesn't look so "dominant";
62, GPRMC 135104.953125 A 51.53334 N -0.065057 W 2.37 221.25 210704 0 0 audrey street;
63, GPRMC 135106.5 A 51.530689 N -0.066607 W 0. 213.71 180704 0 0 smacking sounds;
64, GPRMC 135114.5 A 51.53072 N -0.066585 W 0.42 239.1 180704 0 0 then insects wings;
65, GPRMC 135258.359375 A 51.522476 N -0.07165 W 2.12 196.31 280704 0 0 the same guitar riff;
66, GPRMC 135304.359375 A 51.522419 N -0.071673 W 2.19 191.91 280704 0 0 over and over;
67, GPRMC 135312.359375 A 51.522339 N -0.071683 W 1.38 179.84 280704 0 0 and over;
68, GPRMC 135313.5 A 51.530373 N -0.06801 W 1.82 212.34 180704 0 0 all the windows round here;
69, GPRMC 135318.359375 A 51.522266 N -0.071727 W 2.17 216.06 280704 0 0 train brakes squeak;
70, GPRMC 135321.5 A 51.530289 N -0.068043 W 1.64 205.05 180704 0 0 used to be broken;
71, GPRMC 135353.359375 A 51.521988 N -0.071767 W 0.53 335.96 280704 0 0 push chair wheels squeak;
72, GPRMC 135406.5 A 51.53 N -0.068493 W 0.75 271.51 180704 0 0 red stilletos;
73, GPRMC 135407.953125 A 51.533318 N -0.067693 W 0. 203.06 210704 0 0 couple in park noodling;
74, GPRMC 135437.359375 A 51.521519 N -0.071898 W 2.11 168.09 280704 0 0 click click;
75, GPRMC 135445.359375 A 51.521397 N -0.071955 W 2.62 176.03 280704 0 0 of an old man's crutches;
76, GPRMC 135500.484375 A 51.529648 N -0.068888 W 1.5 224.8 180704 0 0 trucks and dogs;
77, GPRMC 135516.9375 A 51.532803 N -0.067625 W 2.43 178.85 210704 0 0 i think the kids are turkish.;
78, GPRMC 135528.484375 A 51.529541 N -0.06909 W 0.74 140.64 180704 0 0 little white chairs;
79, GPRMC 135555.9375 A 51.532494 N -0.067593 W 1.69 178.9 210704 0 0 butterfly;
80, GPRMC 135718.34375 A 51.520298 N -0.071913 W 2.18 273.19 280704 0 0 hoots and whistles;
81, GPRMC 135722.484375 A 51.52919 N -0.069638 W 1.84 216.49 180704 0 0 soft grass;
82, GPRMC 135750.34375 A 51.520336 N -0.072357 W 1.53 316.73 280704 0 0 sings to a child in bengali;
83, GPRMC 135818.34375 A 51.520557 N -0.072958 W 1.25 291.9 280704 0 0 a plane;
84, GPRMC 135826.484375 A 51.528931 N -0.070167 W 1.88 228.25 180704 0 0 two forget-me-nots;
85, GPRMC 135829.34375 A 51.520466 N -0.073255 W 1.64 258.5 280704 0 0 flies overhead;
86, GPRMC 135836.34375 A 51.520386 N -0.073487 W 3.09 268.9 280704 0 0 pigeon wings flutter;
87, GPRMC 135843.9375 A 51.531574 N -0.067522 W 2.17 181.3 210704 0 0 two nine one.;
88, GPRMC 135938.921875 A 51.531193 N -0.067243 W 0. 145.4 210704 0 0 pips from traffic lights;
89, GPRMC 140020.46875 A 51.528458 N -0.07169 W 2.02 258.18 180704 0 0 distant children and bicycles;
90, GPRMC 140229.328125 A 51.521534 N -0.075733 W 0. 74.38 280704 0 0 tell me a little...;
91, GPRMC 140230.921875 A 51.530186 N -0.068318 W 2.02 227.29 210704 0 0 string ray globe cafe.;
92, GPRMC 140239.328125 A 51.521542 N -0.075632 W 0. 74.38 280704 0 0 about the changes around brick lane...;
93, GPRMC 140246.328125 A 51.521549 N -0.075633 W 0. 74.38 280704 0 0 in the past few years;
94, GPRMC 140248.46875 A 51.528263 N -0.073947 W 0.72 94.48 180704 0 0 school where a girl;
95, GPRMC 140255.46875 A 51.528214 N -0.073903 W 2.09 143.83 180704 0 0 used to make herself sick;
96, GPRMC 140314.453125 A 51.528191 N -0.073575 W 2.44 92.58 180704 0 0 spiky thing ahead;
97, GPRMC 140326.921875 A 51.529697 N -0.068872 W 1.93 217.78 210704 0 0 beeps of i don't know;
98, GPRMC 140425.90625 A 51.529255 N -0.069523 W 2.38 220.64 210704 0 0 fly away;
99, GPRMC 140455.90625 A 51.529053 N -0.069853 W 1.89 223.69 210704 0 0 said the boy on his bike.;

movement studies in breakdance and capoeira. For *TRyPTiCHON 1.0* a new technical framework was developed, using cellphone networks and GPS, with data interpreted in Max/MSP/Jitter software. *TRyPTiCHON 2.0* introduced the spatial mapping of the wandering performer's narration, to which a dancer inside the venue responded.

challenge has become to reduce, to make it less complex: 'less is more'.

AA – You mention 'locative media'. What does that mean exactly?

ML – The term encompasses art and activist works that use position-fixing mobile technologies. Although ordinary GSM mobile phones can fix position, approximately, by triangulation from phone masts, the trickling down of GPS into consumer technology (such as handheld and car navigation units and 3G phones) has triggered a wave of innovative cartographical projects. Some of these projects are being developed within the 'creative industries' sector, especially gaming. But locative media, as informed, for example, by the Situationist International, can also be a locus of resistance.

AA – You talk about using data transmission to create a narrative. Will there be a strong narrative content to *Myriorama*, or is it more like an image, an ambience?

MP – *Myriorama* is inspired by the figure of the King in Italo Calvino's short story 'A King Listens'. Calvino describes the inner world of a king who is initially omniscient and all-powerful, but then gradually realizes the vulnerability of his position (the only place to go from the throne is off it). Exactly because he has spies everywhere, and exactly because his palace is designed to bring all whispers and murmurs to his ears, his omniscience gives way to paranoia and he turns into his own prisoner.

ML – We have access to tools and gadgets and services that turn us all into kings. We can overcome time and distance (travelling without moving, literally this time), and we can live in 'imagined communities' of choice – communities of shared interest rather than geographical vicinity. What many forget is that most of these consumer technologies are spin-offs from military developments, which weren't invented to empower people, but to control and track them.[1]

MP – The recent craze for locative media seems to point to a return of the local and contextual over the global and general; however, most communication networks remain centralised and closed. And even without these technologies, we leave traces – when we use email or mobile phones to reach out, we leave logs on mail servers or records of cells between which calls

[1] '[T]iny listening devices, which are connected to a global positioning system able to track a cab's location by satellite, have been installed in almost all of the city's 70,000 taxis over the past three years, taxi drivers and industry officials say.' – from 'Beijing Taxis Are Rigged for Eavesdropping: Tiny Microphones Can Be Activated By Remote Control' by Shai Oster and Gordon Fairclough, *The Wall Street Journal*, 6 August 2008 *[Ed]*







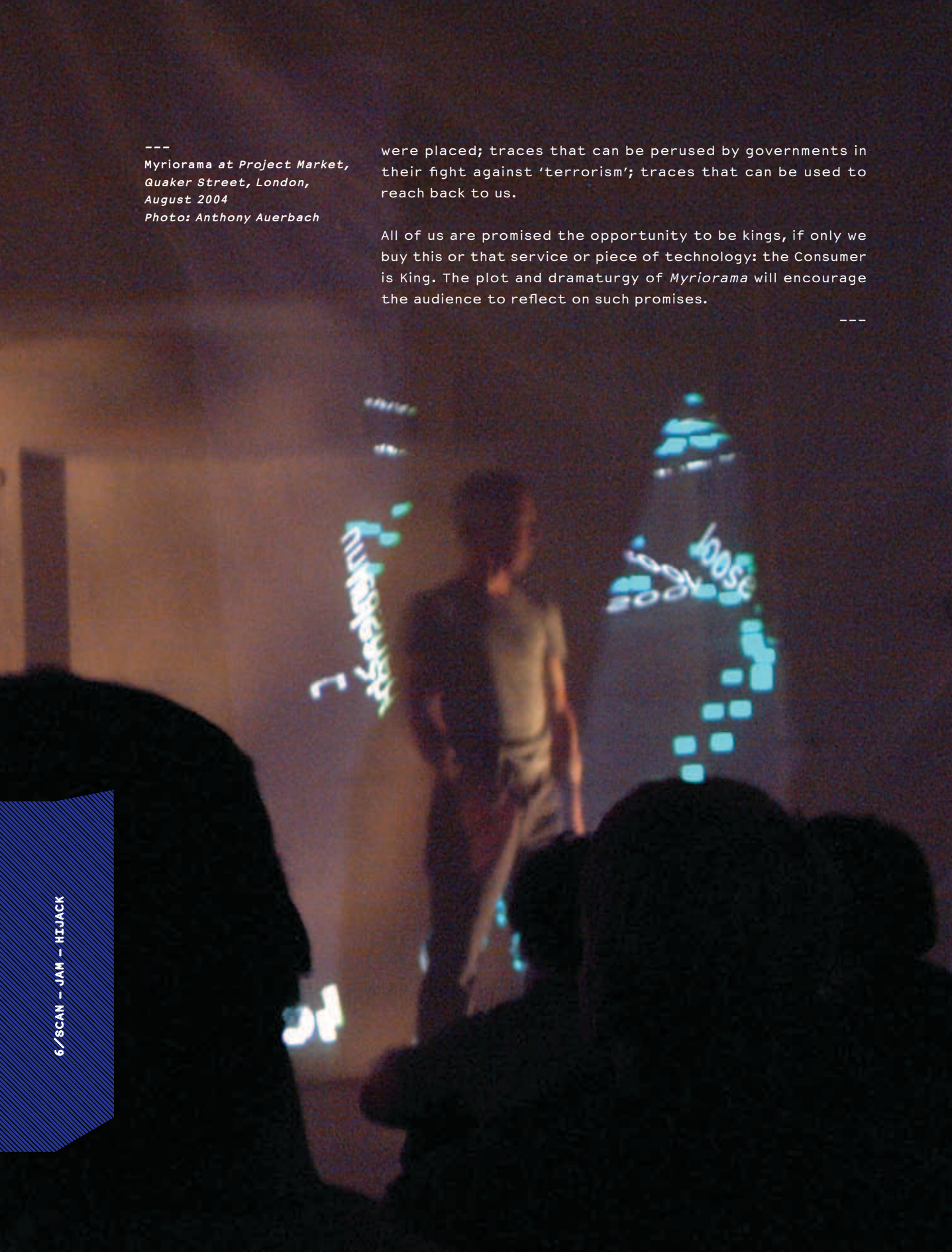


100, GPRMC 140507.90625 A 51.52898 N −0.069988 W 1.55 222.01 210704 0 0 vases cards gifts;
101, GPRMC 140547.3125 A 51.522015 N −0.076222 W 0. 359.83 280704 0 0 two men sit;
102, GPRMC 140558.3125 A 51.522087 N −0.07625 W 1.96 67.01 280704 0 0 smoking in silence;
103, GPRMC 140612.3125 A 51.522194 N −0.075992 W 5.2 18.38 280704 0 0 both have big moustaches;
104, GPRMC 140714.3125 A 51.522259 N −0.075363 W 1.48 145.4 280704 0 1 prowls super slow;
105, GPRMC 140819.890625 A 51.528099 N −0.071805 W 1.59 238.3 210704 0 2 briggs house;
106, GPRMC 140902.890625 A 51.527817 N −0.072453 W 2.42 221.54 210704 0 2 helicopter above.;
107, GPRMC 140942.890625 A 51.527622 N −0.072998 W 2.09 252.77 210704 0 2 virgina road.;
108, GPRMC 141006.890625 A 51.527481 N −0.073173 W 2.33 148.47 210704 0 2 left.;
109, GPRMC 141224.96875 A 51.524796 N −0.071573 W 1.54 171.75 180704 0 4 king stuck on the throne;
110, GPRMC 141247.875 A 51.526432 N −0.072415 W 2.37 155.2 210704 0 2 remembered when ajay was;
111, GPRMC 141254.875 A 51.526367 N −0.072383 W 1.88 143.55 210704 0 2 here we made dancing shapes;
112, GPRMC 141301.96875 A 51.524284 N −0.071937 W 2.76 229.63 180704 0 4 tumult;
113, GPRMC 141337.953125 A 51.524269 N −0.071678 W 0.86 237.69 180704 0 4 beigel stop;
114, GPRMC 141950.859375 A 51.524326 N −0.071787 W 0. 144.31 210704 0 4 home of food for clubbers.;
115, GPRMC 142036.859375 A 51.524307 N −0.07169 W 0. 160.17 210704 0 2 noisy road works annoy my;
116, GPRMC 142040.859375 A 51.524315 N −0.07168 W 0. 160.17 210704 0 2 eardrums.;
117, GPRMC 142125.84375 A 51.524391 N −0.071792 W 0.39 308.44 210704 0 2 momo internet cafe new.;
118, GPRMC 142509.84375 A 51.523739 N −0.071457 W 0. 48.97 210704 0 2 hookah lounge looks cosy.;
119, GPRMC 142753.828125 A 51.522812 N −0.071417 W 1.97 183.92 210704 0 4 ambient jungle from garage market.;
120, GPRMC 142839.828125 A 51.52264 N −0.071487 W 1.87 197.7 210704 0 2 asylum seeker contact...poster;
121, GPRMC 143032.8125 A 51.521801 N −0.071768 W 2.85 192.96 210704 0 2 buxton st.loc;
122, GPRMC 143243.8125 A 51.521206 N −0.07168 W 0. 85.12 210704 0 2 93 feet east.;
123, GPRMC 143246.8125 A 51.521206 N −0.071677 W 0. 85.12 210704 0 2 I'm gps in';
124, GPRMC 143429.796875 A 51.520718 N −0.071902 W 2.17 175.05 210704 0 2 2001 meet tania later;
125, GPRMC 143533.796875 A 51.520466 N −0.07214 W 1.77 196.13 210704 0 2 approaching hanbury.;
126, GPRMC 143537.796875 A 51.520443 N −0.072123 W 2.12 179.17 210704 0 2 the truman;
127, GPRMC 143746.796875 A 51.520142 N −0.071092 W 1.49 63.02 210704 0 2 still helicopter.;
128, GPRMC 143753.796875 A 51.520184 N −0.07096 W 2.63 72.19 210704 0 2 i think they've spotted us.;
129, GPRMC 144020.78125 A 51.52 N −0.068647 W 0.35 125.69 210704 0 2 walking down hanbury;
130, GPRMC 144208.78125 A 51.519688 N −0.066835 W 0. 98.56 210704 0 2 more noisy roadworks.;
131, GPRMC 144702.75 A 51.519711 N −0.06651 W 2.36 277.04 210704 0 2 raymond's sculpture;
132, GPRMC 144715.75 A 51.519726 N −0.0668 W 3.02 270.5 210704 0 2 at the brady;
133, GPRMC 144835.75 A 51.51976 N −0.068493 W 2.55 291.05 210704 0 2 back to brick lane.;
134, GPRMC 145044.75 A 51.52037 N −0.070638 W 1.38 298.41 210704 0 2 travel the world.;
135, GPRMC 145222.5625 A 51.527107 N −0.072795 W 0. 0. 170704 0 4 DID U HEAR ME???;
136, GPRMC 145244.5625 A 51.527142 N −0.072803 W 0. 0. 170704 0 2 i said;
137, GPRMC 145250.734375 A 51.52037 N −0.072838 W 2.81 265.61 210704 0 2 kobi nazrul centre.;
138, GPRMC 145330.546875 A 51.5271 N −0.072818 W 0.89 197.49 170704 0 6 satellite of love;
139, GPRMC 145411.546875 A 51.526699 N −0.07264 W 2.31 164.77 170704 0 6 i'm playing with your mind;
140, GPRMC 145423.546875 A 51.526577 N −0.072558 W 1.68 165.56 170704 0 6 from below to above;
141, GPRMC 145537.546875 A 51.525723 N −0.07206 W 2.62 160.14 170704 0 6 your kingdom;
142, GPRMC 145544.546875 A 51.525635 N −0.072005 W 2.54 169.09 170704 0 6 shall become;
143, GPRMC 145550.546875 A 51.525578 N −0.071967 W 2.3 171.89 170704 0 6 my swingdom;
144, GPRMC 145724.140625 A 51.524113 N −0.071562 W 1.11 192.57 180704 0 2 beep beep;
145, GPRMC 145820.140625 A 51.523697 N −0.071487 W 1.82 178.12 180704 0 2 exhaust fumes;
146, GPRMC 145827.125 A 51.52364 N −0.071493 W 1.73 179.37 180704 0 2 the blue smell is hissible;
147, GPRMC 145849.125 A 51.523487 N −0.071437 W 1.96 184.31 180704 0 2 madonna distort voice;
148, GPRMC 150003.125 A 51.523121 N −0.071472 W 1.39 251.37 180704 0 2 police interviews;
149, GPRMC 150037.125 A 51.522949 N −0.071558 W 1.61 192.46 180704 0 2 phone call from friend;
150, GPRMC 150117.125 A 51.5229 N −0.071693 W 0. 217.34 180704 0 2 fantastic;
151, GPRMC 150149.125 A 51.522892 N −0.071718 W 0. 230.45 180704 0 2 ...too many gadgets;
152, GPRMC 150456.109375 A 51.52203 N −0.071742 W 0.31 352.46 180704 0 2 the murmur from people;
153, GPRMC 150538.109375 A 51.521751 N −0.071938 W 1.94 199.36 180704 0 2 foreigners being guided around...;
154, GPRMC 150545.109375 A 51.521736 N −0.071902 W 2.33 198.65 180704 0 2 to the sound of light drum and bass;
155, GPRMC 150553.140625 A 51.52124 N −0.073767 W 0. 0. 170704 0 6 the writing;
156, GPRMC 150607.140625 A 51.522129 N −0.073983 W 0. 0. 170704 0 6 is on the walls;
157, GPRMC 150614.109375 A 51.521549 N −0.071662 W 2.6 110.27 180704 0 6 jazz drifting footsteps;
158, GPRMC 150633.125 A 51.522209 N −0.074328 W 2.64 271.5 170704 0 6 weapon of disinformation;
159, GPRMC 150641.125 A 51.522217 N −0.074308 W 0. 208.12 170704 0 6 weapon of sound;
160, GPRMC 150706.09375 A 51.521328 N −0.071823 W 1.47 171.56 180704 0 4 clinking fake show off;
161, GPRMC 150706.125 A 51.522175 N −0.074303 W 0.29 179.41 170704 0 4 a flower grown;
162, GPRMC 150730.09375 A 51.521133 N −0.071797 W 1.77 181.89 180704 0 4 rolling of trolleys;
163, GPRMC 150758.09375 A 51.520908 N −0.071695 W 2.41 142.01 180704 0 4 15 lighters for a pound;
164, GPRMC 150802.125 A 51.522072 N −0.074227 W 0. 175.17 170704 0 4 in the underground;
165, GPRMC 150833.09375 A 51.520908 N −0.07197 W 1.27 176.38 180704 0 4 dense crowds;
166, GPRMC 150840.09375 A 51.520874 N −0.071933 W 1.39 189.3 180704 0 4 rubbing their hardwood purchases;
167, GPRMC 150906.09375 A 51.520767 N −0.071918 W 1.96 275.27 180704 0 7 witness appeal;
168, GPRMC 150935.09375 A 51.520409 N −0.071857 W 2.72 206.75 180704 0 4 bicycle stops;
169, GPRMC 151019.09375 A 51.520313 N −0.071905 W 0. 324.98 180704 0 4 the low growl of the sports car;
170, GPRMC 151026.09375 A 51.520329 N −0.071905 W 0.48 31.69 180704 0 4 the high flap of the plastic sandals;
171, GPRMC 151101.09375 A 51.520351 N −0.071917 W 0.44 77.36 180704 0 4 we better go;
172, GPRMC 151128.078125 A 51.520378 N −0.072272 W 2.43 284.71 180704 0 4 i like voices;
173, GPRMC 151153.078125 A 51.520428 N −0.072687 W 0.82 340.01 180704 0 4 pigeon feet on tarmac;
174, GPRMC 151230.671875 A 51.522224 N −0.073128 W 1.03 70.8 170704 0 2 back;
175, GPRMC 151236.078125 A 51.520386 N −0.073153 W 0.73 258.54 180704 0 4 mcdonalds cartons;
176, GPRMC 151244.078125 A 51.52037 N −0.073215 W 0.33 56.5 180704 0 4 crushed by car wheels;
177, GPRMC 151319.078125 A 51.520313 N −0.073247 W 1.39 358.21 180704 0 4 high heels;
178, GPRMC 151326.078125 A 51.520222 N −0.073327 W 0.81 242.56 180704 0 4 distant music;
179, GPRMC 151334.078125 A 51.520256 N −0.073437 W 1.25 348.27 180704 0 4 faint helicopter;
180, GPRMC 151341.671875 A 51.522007 N −0.072235 W 1.8 95.23 170704 0 4 crack online;
181, GPRMC 151415.609375 V 51.520271 N −0.073375 W 0. 0. 180704 0 4 football shouts turn out to be;
182, GPRMC 151440.671875 A 51.52203 N −0.071675 W 0.68 91.36 170704 0 6 watch me;
183, GPRMC 151448.671875 A 51.52203 N −0.071662 W 0. 147.84 170704 0 6 reeling in the line;
184, GPRMC 151538.65625 A 51.522129 N −0.0716 W 0.58 52.1 170704 0 6 fish for supper;
185, GPRMC 151545.65625 A 51.522167 N −0.071567 W 0. 51.04 170704 0 6 tastes divine;
186, GPRMC 151611.65625 A 51.522152 N −0.071535 W 0. 197.01 170704 0 6 the bone is chewed;
187, GPRMC 151614.625 V 51.520271 N −0.073375 W 0. 0. 180704 0 4 brazilian drumming;
188, GPRMC 151619.65625 A 51.522144 N −0.071512 W 0. 74.84 170704 0 6 the throne is mine;
189, GPRMC 151629.625 V 51.520271 N −0.073375 W 0. 0. 180704 0 4 capoeira;
190, GPRMC 151635.625 V 51.520271 N −0.073375 W 0. 0. 180704 0 4 marimba;
191, GPRMC 151635.65625 A 51.522118 N −0.071542 W 0. 78.66 170704 0 6 the flesh in bangladesh;
192, GPRMC 151739.65625 A 51.52211 N −0.071537 W 0. 167.87 170704 0 6 a sign;
193, GPRMC 151755.65625 A 51.521957 N −0.071625 W 1.88 184.44 170704 0 6 hope im not a victim of crime;
194, GPRMC 151805.65625 A 51.521866 N −0.071715 W 2.22 191.68 170704 0 6 grey eagles rise above the grime;
195, GPRMC 151938.609375 A 51.521606 N −0.072775 W 0.94 77.94 180704 0 3 hands on tarmac;
196, GPRMC 151941.65625 A 51.521126 N −0.072 W 0.39 86.55 170704 0 6 he just wants to eat;
197, GPRMC 151954.609375 A 51.521706 N −0.072752 W 1.11 24.51 180704 0 4 its a deadend;
198, GPRMC 152016.640625 A 51.520859 N −0.072035 W 3.09 205.12 170704 0 6 sight specific;
199, GPRMC 152025.609375 A 51.521427 N −0.072882 W 1.78 136.83 180704 0 4 airconditoning;
200, GPRMC 152031.640625 A 51.520752 N −0.071975 W 2.18 276.9 170704 0 6 we are the slaves;
201, GPRMC 152042.640625 A 51.520817 N −0.072132 W 1.29 187.44 170704 0 6 of objects around us;

Myriorama *at Project Market, Quaker Street, London, August 2004*
Photo: Anthony Auerbach

were placed; traces that can be perused by governments in their fight against 'terrorism'; traces that can be used to reach back to us.

All of us are promised the opportunity to be kings, if only we buy this or that service or piece of technology: the Consumer is King. The plot and dramaturgy of *Myriorama* will encourage the audience to reflect on such promises.











202, GPRMC 152057.640625 A 51.520573 N −0.07187 W 0. 171.34 170704 0 0 artistic sentiment;
203, GPRMC 152208.640625 A 51.520329 N −0.071738 W 1.2 223.43 170704 0 6 as commercial condiment;
204, GPRMC 152240.59375 A 51.520321 N −0.073567 W 2.51 288.15 180704 0 4 she doesnt want to do it;
205, GPRMC 152316.59375 A 51.520298 N −0.074203 W 1.68 286.13 180704 0 4 why aren't you gay;
206, GPRMC 152331.640625 A 51.519753 N −0.071735 W 0. 29.49 170704 0 6 the little prince;
207, GPRMC 152347.59375 A 51.520523 N −0.074535 W 2.35 322.96 180704 0 4 like all the other boys;
208, GPRMC 152409.640625 A 51.519775 N −0.071408 W 1.03 111.68 170704 0 6 must eat his mince;
209, GPRMC 152424.59375 A 51.520824 N −0.074688 W 1.38 25.68 180704 0 6 complaint forms £16;
210, GPRMC 152441.59375 A 51.520981 N −0.074583 W 2.11 5.73 180704 0 6 showshop music;
211, GPRMC 152458.625 A 51.519817 N −0.070957 W 1.15 271.64 170704 0 6 so ible he become invince;
212, GPRMC 152543.59375 A 51.521549 N −0.074437 W 0.98 337.73 180704 0 4 brakes so romantic;
213, GPRMC 152601.59375 A 51.521549 N −0.074428 W 0.28 235.8 180704 0 4 met an old friend;
214, GPRMC 152606.625 A 51.519733 N −0.070858 W 0. 147.64 170704 0 6 sounds of nations;
215, GPRMC 152614.625 A 51.519733 N −0.070817 W 2.16 103.17 170704 0 6 where tears flow like wine;
216, GPRMC 152656.578125 A 51.521549 N −0.07426 W 1.19 94.89 180704 0 4 paper bag crunch;
217, GPRMC 152806.578125 A 51.521427 N −0.073537 W 1.02 313.97 180704 0 4 laughter i hear pennie;
218, GPRMC 152813.578125 A 51.521442 N −0.073565 W 0.78 313.91 180704 0 4 whining laughing;
219, GPRMC 152819.578125 A 51.52145 N −0.073587 W 1.17 257.85 180704 0 4 found some nice technology;
220, GPRMC 152901.609375 A 51.520363 N −0.07027 W 4.02 348.44 170704 0 6 this is the sound;
221, GPRMC 152908.609375 A 51.520401 N −0.070382 W 3.7 343.61 170704 0 6 of your power imploding;
222, GPRMC 153042.390625 A 51.520386 N −0.070975 W 0. 240.63 170704 0 6 and eroding;;
223, GPRMC 153108.5625 A 51.52132 N −0.073543 W 0. 313.44 180704 0 6 bouncing plastic falling;
224, GPRMC 153120.390625 A 51.520351 N −0.071225 W 0. 247.91 170704 0 6 BANGLA;
225, GPRMC 153324.390625 A 51.521133 N −0.071725 W 0. 131.76 170704 0 6 CREATIVE links;
226, GPRMC 153345.5625 A 51.521477 N −0.07349 W 0.55 180.51 180704 0 6 and that's the end of that one;
227, GPRMC 153429.390625 A 51.52116 N −0.071865 W 0. 294.32 170704 0 6 to iron kinks;
228, GPRMC 153631.375 A 51.522396 N −0.071657 W 2.58 10.02 170704 0 6 plugginto your sockit;
229, GPRMC 153728.375 A 51.522381 N −0.071702 W 0.44 252.35 170704 0 6 rocket knight rider;
230, GPRMC 153818.375 A 51.522427 N −0.071637 W 2.26 12. 170704 0 6 im closer to the centre;
231, GPRMC 153826.375 A 51.522518 N −0.071627 W 1.72 354.49 170704 0 6 of your web now;
232, GPRMC 153833.375 A 51.52264 N −0.07162 W 0. 232.53 170704 0 6 little spider;
233, GPRMC 154004.359375 A 51.522884 N −0.071748 W 0. 255.35 170704 0 6 to advertise;
234, GPRMC 154011.359375 A 51.522877 N −0.071782 W 1.44 325.05 170704 0 6 in this space;
235, GPRMC 154026.359375 A 51.523029 N −0.071735 W 0.48 275.86 170704 0 6 overdose on da sign;
236, GPRMC 154033.359375 A 51.523064 N −0.071773 W 1.88 207.58 170704 0 6 the hiatus;
237, GPRMC 154040.359375 A 51.523129 N −0.071713 W 0.97 316.06 170704 0 6 is back off again;
238, GPRMC 154048.359375 A 51.523235 N −0.071667 W 0.86 318.73 170704 0 6 suburban bliss;
239, GPRMC 154055.359375 A 51.52335 N −0.071307 W 2.77 64.91 170704 0 6 moderntapestriesinfecting;
240, GPRMC 154139.359375 A 51.523724 N −0.070993 W 0. 24.79 170704 0 6 mission 1 complete;
241, GPRMC 155250.84375 A 51.524593 N −0.071877 W 0. 139.41 180704 0 4 bleep bleep bleep;
242, GPRMC 155325.84375 A 51.524593 N −0.071918 W 0. 240.51 180704 0 4 pigeon flap wing;
243, GPRMC 155454.84375 A 51.524551 N −0.07181 W 0.41 216.35 180704 0 4 bag rustle;
244, GPRMC 155523.828125 A 51.524536 N −0.071753 W 0.88 175.87 180704 0 4 brush sweep;
245, GPRMC 155619.828125 A 51.524372 N −0.07158 W 0.7 331.65 180704 0 4 where is the sound;
246, GPRMC 155700.828125 A 51.524406 N −0.071558 W 0. 2.14 180704 0 4 that is my self;
247, GPRMC 155743.828125 A 51.52417 N −0.071508 W 0. 180.45 180704 0 4 water spray pave grit;
248, GPRMC 155809.828125 A 51.524014 N −0.071465 W 1.79 161.27 180704 0 4 like my heart mind;
249, GPRMC 155839.828125 A 51.523998 N −0.071457 W 0.99 199.17 180704 0 4 foot coke can;
250, GPRMC 155911.8125 A 51.523804 N −0.071447 W 2.89 154.53 180704 0 4 crunch click;
251, GPRMC 160138.8125 A 51.523647 N −0.071653 W 0.6 261.54 180704 0 4 click bike spoke wheel like;
252, GPRMC 160243.8125 A 51.523518 N −0.071523 W 0.65 306.21 180704 0 4 metronome of a fast heart;
253, GPRMC 160408.796875 A 51.523479 N −0.071545 W 0.98 302.59 180704 0 4 kerlanghangardang;
254, GPRMC 160520.796875 A 51.52335 N −0.07142 W 2.08 185.22 180704 0 4 pigeon flap heart beat swift;
255, GPRMC 160624.796875 A 51.522869 N −0.071542 W 1.78 189.95 180704 0 4 small voice from a plasticbox;
256, GPRMC 160647.796875 A 51.522663 N −0.071565 W 2.04 191.39 180704 0 4 krip krip krip;
257, GPRMC 160658.796875 A 51.52256 N −0.071543 W 1.48 145.38 180704 0 4 car wheel spin tyre;
258, GPRMC 160902.78125 A 51.521736 N −0.07175 W 1.47 186.15 180704 0 4 foot sandal flap;
259, GPRMC 161059.78125 A 51.520866 N −0.071723 W 1.63 182.06 180704 0 4 hahahahahahahahahahaha;
260, GPRMC 161209.765625 A 51.520329 N −0.071992 W 2.1 169.06 180704 0 4 like heart but not a heart;
261, GPRMC 161228.765625 A 51.520191 N −0.071818 W 1.6 177.44 180704 0 4 matsuni;
262, GPRMC 161419.765625 A 51.519726 N −0.07236 W 1.85 274.46 180704 0 4 sound inside like a beat of self;
263, GPRMC 161423.765625 A 51.519711 N −0.072432 W 1.95 272.76 180704 0 4 singing like a bird voice;
264, GPRMC 161551.765625 A 51.519817 N −0.073392 W 0. 14.87 180704 0 4 a quiet time like a pause in you;
265, GPRMC 161558.765625 A 51.519768 N −0.07341 W 0.7 182.37 180704 0 4 and a pause and a click;
266, GPRMC 161828.75 A 51.519588 N −0.074242 W 1.03 279.44 180704 0 4 youre not listening to him;
267, GPRMC 161915.75 A 51.519863 N −0.074427 W 1.78 341.73 180704 0 4 squeak wheel like a machine bird song;
268, GPRMC 162007.75 A 51.520191 N −0.074393 W 0.35 61.3 180704 0 4 car likes the sound;
269, GPRMC 162055.734375 A 51.520531 N −0.074502 W 1.93 326.06 180704 0 4 of a happy kitten's throat;
270, GPRMC 162141.734375 A 51.520851 N −0.074775 W 1.89 336.97 180704 0 4 sandal flap;
271, GPRMC 162149.734375 A 51.520908 N −0.074833 W 1.68 333.77 180704 0 4 click foot slap;
272, GPRMC 162220.734375 A 51.521111 N −0.07508 W 1.8 332.79 180704 0 4 mosquito bike speed rush;
273, GPRMC 162255.734375 A 51.521362 N −0.075327 W 1.99 337.89 180704 0 4 vvvrrrrrrrrraaaaaoooooowwwwww;
274, GPRMC 162438.71875 A 51.522224 N −0.075385 W 1.33 35.71 180704 0 4 and purrs of happy heart;
275, GPRMC 162503.71875 A 51.522194 N −0.075038 W 1.62 85.11 180704 0 4 purr purr purrs;
276, GPRMC 162522.71875 A 51.522167 N −0.074873 W 1. 71.13 180704 0 4 kerchoww kerchowww;
277, GPRMC 162626.71875 A 51.522182 N −0.074635 W 2.54 96.97 180704 0 4 ball fence ring kerchowww;
278, GPRMC 162638.71875 A 51.522167 N −0.07442 W 2.15 112.79 180704 0 4 bounce bounce bounce;
279, GPRMC 162646.71875 A 51.522102 N −0.07436 W 0.86 163.69 180704 0 4 kerchow kerchow kerchow;
280, GPRMC 211916.171875 A 51.535286 N −0.060015 W 0. 0. 280704 0 5 diana;
281, GPRMC 213323.125 A 51.535027 N −0.060072 W 0.83 330.78 280704 0 5 social sculpture;
282, GPRMC 214419.09375 A 51.535133 N −0.062645 W 0.56 200.21 280704 0 5 triggers a memory;
283, GPRMC 214536.078125 A 51.534653 N −0.063317 W 1.56 220.52 280704 0 5 holding a machine;
284, GPRMC 214543.078125 A 51.534554 N −0.063397 W 1.45 217.17 280704 0 5 am talking while walking;
285, GPRMC 214657.078125 A 51.533764 N −0.064207 W 2.65 349.7 280704 0 5 see in the dark blind walk;
286, GPRMC 214826.078125 A 51.53344 N −0.065013 W 1.27 221.81 280704 0 5 buy credit;
287, GPRMC 214927.0625 A 51.532505 N −0.065467 W 2.55 200.02 280704 0 5 trees move leaves;
288, GPRMC 215122.0625 A 51.531544 N −0.066015 W 1.56 206.28 280704 0 5 in the summer night wind;
289, GPRMC 215425.046875 A 51.530396 N −0.067998 W 1.13 343.17 280704 0 7 the fast mirror...;
290, GPRMC 215539.046875 A 51.53 N −0.068647 W 1.57 272.72 280704 0 7 and the slow;
291, GPRMC 215738.03125 A 51.529434 N −0.069328 W 1.11 233.17 280704 0 5 my mother watches breaking news;
292, GPRMC 220035.03125 A 51.52853 N −0.070897 W 0.37 194.77 280704 0 5 questioning who?;
293, GPRMC 220151.015625 A 51.52832 N −0.071573 W 2.02 289.46 280704 0 5 hegemony or survival;
294, GPRMC 220322.015625 A 51.527393 N −0.071995 W 1.72 240.21 280704 0 5 left wingers beware;
295, GPRMC 220508.015625 A 51.526863 N −0.072577 W 2.28 145.22 280704 0 5 let the terrorist live;
296, GPRMC 220553. A 51.526447 N −0.072268 W 1.54 158.85 280704 0 5 good night darling;
297, GPRMC 220634. A 51.5261 N −0.071975 W 0. 114.6 280704 0 5 language of two young men;
298, GPRMC 221307.25 A 51.524269 N −0.071608 W 0.33 146.98 280704 0 7 she saw him coming;
299, GPRMC 221843.21875 A 51.524651 N −0.070077 W 0. 56.08 280704 0 4 marketed;
300, GPRMC 221906.21875 A 51.524975 N −0.07015 W 0.4 330.77 280704 0 2 they know where we are;
301, GPRMC 221917.21875 A 51.524982 N −0.070225 W 0.88 280.87 280704 0 2 can track u;
302, GPRMC 221927.21875 A 51.525017 N −0.070235 W 1.87 340.67 280704 0 2 listen to u;

BOW SPACE

Doris, resident of Bow, takes ambientTV.NET for a walk around her neighbourhood.

Her reminiscences are recorded orally, by text messaging and GPS to create an audio-visual memory map of Bow.

a project by ambientTV.NET (demoTV) commissioned by [s p a c e]



Left: Poster for Bow Space *(audio-visual memory map commissioned by SPACE Studios for Bow Festival, London 2004)*

Above: Stencil by arofish on Brick Lane, 2004
Photo: Mukul Patel

Manu Luksch & Mukul Patel
2006

Satellite of Love was part of *Exploding Television*, an art event parallel to the 35th International Film Festival Rotterdam curated by Edwin Carels.

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ambient.lounge *with* Microtel *in the foreground*
Photo: Bob Goedewaagen

1
The Moment of Long Now *(Juha Huuskonen)*

2
Unscheduled TV *(Rachel Baker)*

3
Pirate Radio Scanner *(Irational.org)*
Photos: Tina Hage

Overleaf: Microtel pages. ***Contributing artists: a boy and his SID, adrian pawley, agam andreas, andy gee, anonymous, babel, ben jones paperrad, ben sisto, bioxlat, brendan ford, bruno curfs, carola, unterberger probst, carl, bulldozerman, chebi, cinema.nl, claire chanel, cory arcangel, cosmic disciple, dan tombs, danielle roberts, denheer, dispyz, dj slippers, drx, eric parren, error32, emo, evert hillhiorst, firestARTer, giovanni rosa, grand theft andrew, gyz la riviere, hans dekker, hello, henrik hannebo, igor baskin, ilja thomassen, inexpensive, JODI, john veron, jos de ruiter (continues overleaf...)***

VBI

VBI is the *Voluptuously Blinking Eye* of ambientTV.NET that SCANS the media for intervention opportunities, JAMS the data party in the ether, and HIJACKS the network...

VBI is a broadcast studio and lounge produced by ambientTV.NET for the *Satellite of Love* exhibition of the 35th International Film Festival Rotterdam, 2006. *VBI* is a softening of broadcast schedules, a fuzziness at the edge of the screen, a place of disturbing slowness in speedy times. *VBI* is the Vertical Blanking Interval of the NOS (Dutch TV) broadcast signal, into which viewers-turned-producers insert teletext art. *VBI* is a directory of unscheduled broadcasts, a survey of illegal transmissions, an unwarranted reverse-engineering of the toys that make us tick. Working in the technical margins of the broadcast spectrum, and giving expression to voices marginalized by media conglomeration, *VBI* conducts an aesthetic archaeology of TV and speculates on possible futures for independent media.

VBI comprises *Microtel* and the *ambient.lounge*. *Microtel* is a live teletext production studio run by Lektrolab (Paul B. Davis and Emma Davidson) that broadcasts works created on the spot by visitors, and those submitted beforehand by members of the micromusic.net community, on the teletext service of terrestrial Dutch channel NOS.

Hosted by Tina Hage, the *ambient.lounge* is a place to meet and relax, discuss and conspire, listen to talks or attend workshops. It contains works that deploy low-tech, DIY, or critical approaches to media production or distribution, including:

- *Broadbandit Highway* (Manu Luksch & Ilze Black, 2001)
- *The Moment of Long Now* (Juha Huuskonen), which slows down a live TV news feed to 1/100th of real time.
- *Pirate Radio Scanner* (Irational.org), an online interface to control a scanner located in London, which tunes in to pirate stations
- *Unscheduled Television* (Rachel Baker), an online directory of artists' TV projects in the UK.
- The *Hacked Nintendo* installation, and regular Nintendo hacking workshops (Paul B. Davis and Emma Davidson)

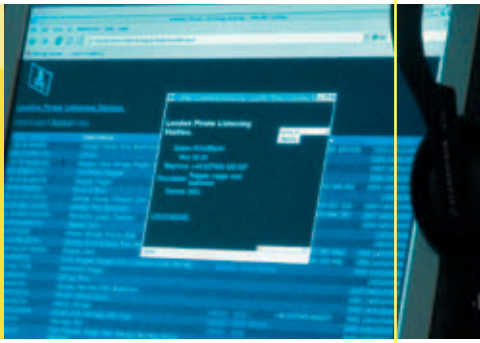

HUACK
JAM


193,
EMPLOYMENT:

1


directory
Organization
Program
Classifier
Description

2



3


CHAOS COMPUTER CLUB e.V.
WHERE ARE YOU ??? MUKUL??
WHAM!
SPACE INVADERS
PRESS START
TAKE TIME TO RESET
LOOK MUM I'M ON TV!!
FACELESS, JUST POSITIONED.
LONE PIXEL ON YOUR SCREEN-
I, ANONYMOUS.
Witte de With

UNSCHEDULED TELEVISION: TOWARDS A DIRECTORY OF CONVERGED MEDIA EXPERIMENTS

Rachel Baker
2006

Convergence of Internet, TV and cinema brings new conventions and formats, new modes of behaviour and habits, new possibilities and new restrictions. The differences between these discrete mediums are worth re-emphasizing in terms of cultural phenomena rather than technology. Attention should also be brought to the formation of routines and rituals around production, distribution and consumption of the moving image in the age of desktop video editing, BitTorrent, and broadband.

Television is often derided as the degenerating, manipulative, pacifying instrument of corporate and state hegemony, but cultural studies students will also characterize it in more innocuous terms: TV holds a central position within the various realities and discourses which construct everyday life, and is a predominant organising principle for households, families and communities all over the world. Moreover, the idea that TV is simply a propaganda machine only persists until the realisation that the medium is there to be manipulated, rather than to be manipulated by.

Understanding the future of TV in an age of digital convergence means understanding the impact on patterns of behaviour where the communal mode of watching scheduled TV has broken down, and where long-established professional modes of production are increasingly challenged by the autonomous amateur.

We didn't have a TV in our house until I was 13, an absence that induced a chronic addiction lasting for most of my teens. For good or for ill, many of my cultural references, sensations and perspectives have come from early 1980s British kids' programmes and the rise of alternative TV. Cult TV emerged when the conventional TV formats were confronted with experimental, groundbreaking shows – often comedies such as *Monty Python*. One of the most recent cult TV shows to be smuggled onto mainstream TV in the UK, *South Park*, was available on the Internet before it was broadcast, and this is likely to be a more common model of distribution for innovative works of moving image.

Commissioned by ambientTV.NET for *VBI: the ambient.lounge* in the *Satellite of Love*, Witte de With, during the 35th International Film Festival Rotterdam (2006)

www.irational.org/tm/unscheduledtv

Microtel ***artists (continued from previous page): , jukka desert planet, karen cham, khingkobra, laurie halsey brown, lektrogirl, liseth, lizzy haven, lukas hajek, masterdahiki, mesaphlin, michel pilger, michael connor, naan elderling, nicole sante, niels brouwers, niels engel, olivier ruellet, patrik lichty, oscar van offeren, otro, paul b davis, philip linde, piratejack, poke 1,170, redguts, roosje & struba, snowrobot – 8 bit peoples, ruud, ruud van riet, sander & sander, satim, scary sherman, schmx, shoddy, simon & alex, steven read, supercarameloso, tahar haouachi, the Ye_ti, thor johnson, tilo, todd shy, twan, voskomo, videohometraining, wibo posthumus, worldKit, yerzmyey***

The way viewing is structured by the TV apparatus, in particular by scheduling, is a key factor influencing consumption: TV shapes habits not only directly through programme (and ad) content, but also by creating routines of behaviour. When and in what circumstances a programme (or ad) is seen carries great significance for industry, particularly advertising. Before multichannel cable and satellite, TV culture in Britain was dominated by a scheduling regime emerging from an environment of only four channels.

The BBC would go head-to-head for prime-time viewing spots with ITV and Channel 4. 7pm soap wars, or 9pm news, Friday night comedy, Saturday evening light entertainment – a whole range of viewing fare served up to structure the rhythm of ones day according to age, demographic, household composition, etc. TV advertising depends on this precise ordering of audiences and the (predominantly ad-free) BBC is no less part of the game. Multiple channels, BitTorrent, and broadband are changing our habits dramatically. Live Reality TV and football (also a mix of reality and drama) are probably the last bastions of large-scale communal TV watching, but while office conversations are all about last night's episode of *Big Brother* or *Pop Idol*, at home computers are busy downloading entire series of *Lost* or *CSI* to view over the course of a weekend. The advertising industry is rapidly reinventing itself to adapt to new consumption habits.

Not only are consumption habits changing, but also the division between production, consumption and distribution is breaking down. The phenomenon of producing one's own moving image content and webcasting online is still less widespread than the downloading of industry-produced content. Copyright control over the image is exerted rigorously, and video streaming is far less prevalent than audio streaming, but the opportunities afforded by cheap home video production and open online distribution channels are not to be ignored. The desire for shared narratives persists as ever – it is the possibilities to instruct or participate in the production and distribution of these narratives that have increased so dramatically.

In a gesture towards Gerry Schum's *Television Gallery* of the early 1970s, I am attempting to assemble a diversity of projects that reconfigure approaches to TV (in the widest sense of the term) and consider the behaviours and habits we have grown up with and the new ones currently forming. This web directory of projects is entitled *Unscheduled Television*.

The projects presented in this collection represent a range of responses to TV culture and online moving image from artists and activists experimenting with the available technology – whether it be remixing existing TV, film and video footage, scratch video, online video art, video-blogs, online archives, or emulating and referencing TV culture nostalgically. The classification scheme is an initial sketch. As new projects are added, during and after *Satellite of Love*, a more robust scheme will emerge, based on the nature of the activities (rather than the medium).

"The television screen is the retina of the mind's eye."

***Dr. Brian O'Blivion, (from David Cronenberg's 1983 film* Videodrome)**

Manu Luksch & Mukul Patel
2008

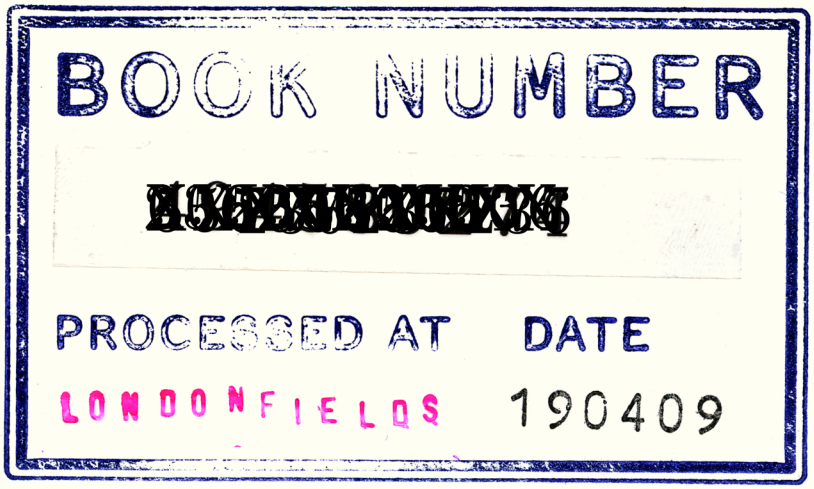
LOVE, PIRACY, AND THE OFFICE OF RELIGIOUS WEBLOG EXPANSION

Love, Piracy, and the Office of Religious Weblog Expansion is a collaborative reading project that continues online at: www.ambientTV.NET/love

The text that follows was exactingly censored before this book was allowed to enter into circulation. The redaction, which is unique to this copy, was executed as part of a performance during the book launch. The entire text can be read only by combining the information in all 1,500 copies of this edition.

Coding: **Elke Michlmayr**

Physical copies of the book have a unique word left uncensored in the following pages, and a unique serial number.



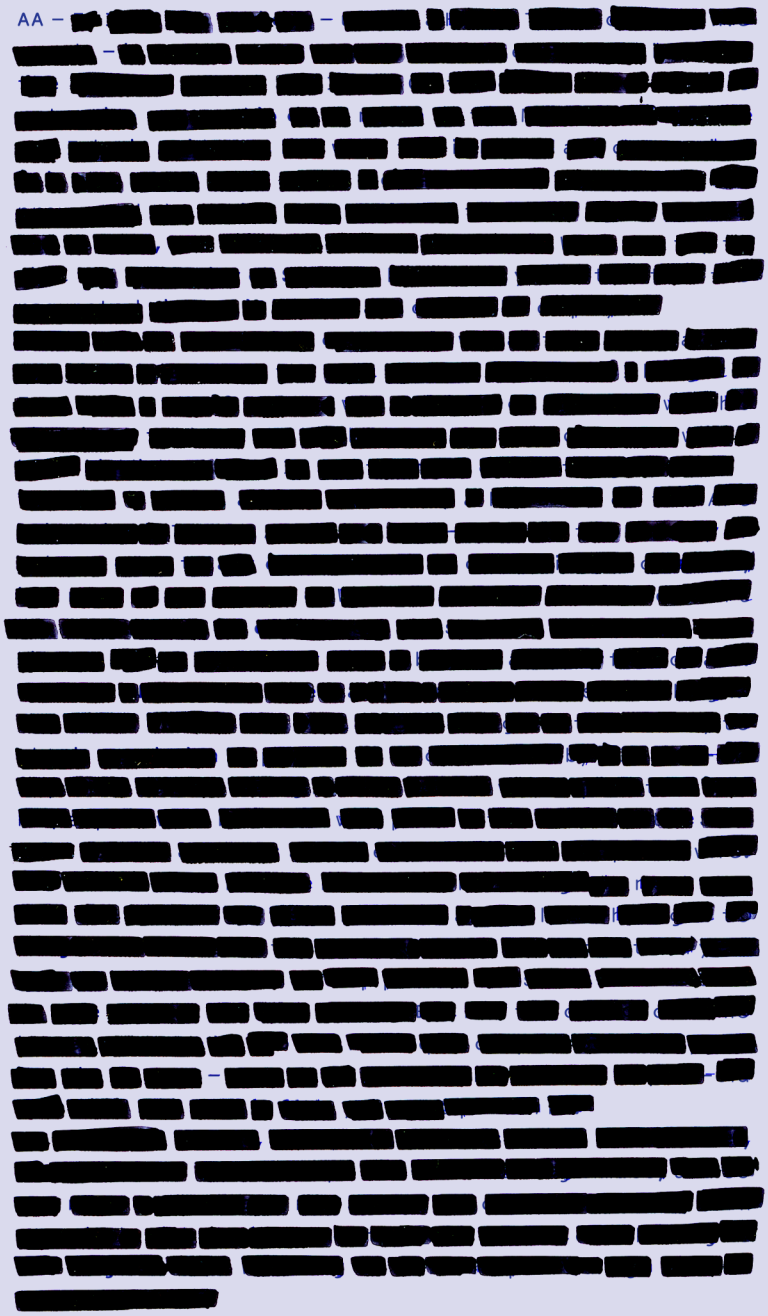
Ali Alizadeh
2008

Love, Piracy, and the Office of Religious Weblog Expansion

In conversation with **Mukul Patel**
MP = Mukul Patel
AA = Ali Alizadeh

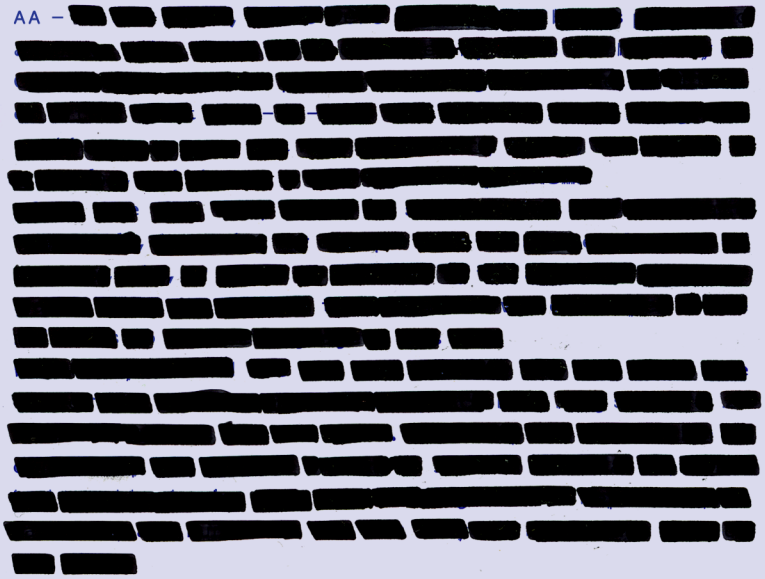
MP – What is the recent history of censorship in Iran?

AA –



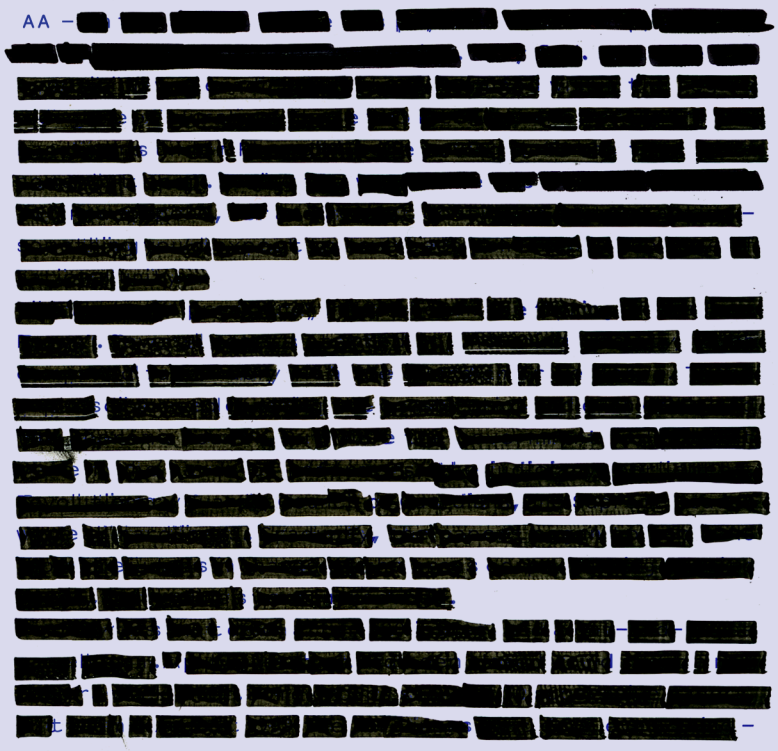
MP – What changed with the introduction of the computer?

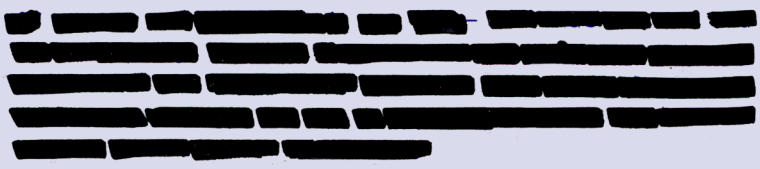
AA –



MP – What about political censorship?

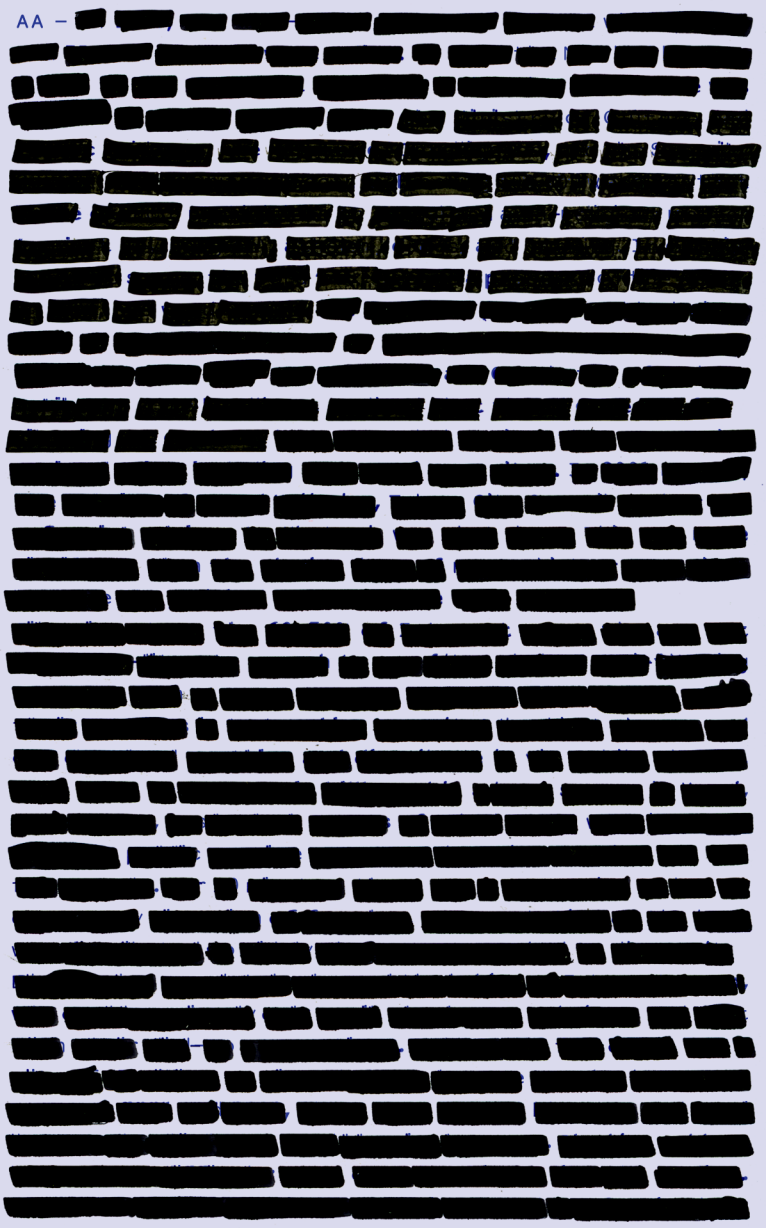
AA –

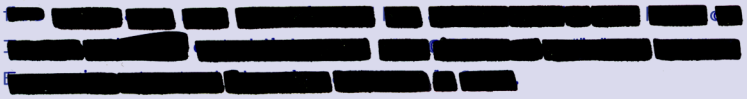




MP – How is the Internet policed in Iran?

AA –





MP – That's too good to be true. What about piracy?

AA –



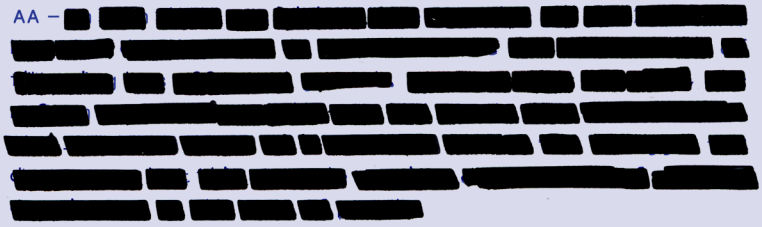
MP – In China, multinational corporations serve up a corrupted form of freedom of speech, not based on a call on human rights but rather on the freedom of the market. How does the situation differ in Iran?

AA –



MP – The optimists of the net claim that the information economy finally makes freedom and democracy possible.

AA –



7/QUIS CUSTODIET IPSOS CUSTODES

Stand up to
close scrutiny.
Raymond
98200900042



Standing up to close
scrutiny (Bombay/Abu Dhabi)
Pair of photographic prints,
each 120 x 84 cm
(Manu Luksch, 2005)

back at work:
the daily grind
at the Daily Myth
Ma Nu shapes worldviews
by shuffling old data
into new news

THE SPECTRAL CHILDREN

london, 2033

new towers mark the skyline
glass facades flashing code
to the central watchtower
a holographic web
of risk and trade
woven through the data cloud
of radioactive smog
that chokes those overlooked
by the optical revolution

far below, in the nether city
in the pavlovian underbelly
familiar patterns repeat
ad infinitum

except... look:
Ma Nu is moving home
in an anarchic break
from the everyday drone

–

back at work:
the daily grind [...]

Manu Luksch & Mukul Patel
2006

Excerpt from intertitles text of *Faceless: The Spectral Children* (multiple DVD players and monitors, 15 min looping video installation, 2006)

First shown at GBK Gallery Barry Keldoulis as part of the Sydney Biennale 2006

The Spectral Children
Installation view at* Digitally Yours, *Aboa Vetus & Ars Nova Museum, Turku (Finland, 2007)
Curated by Andy Best

12 March 2005

[redacted]
Store Manager
Kmart store [redacted]

[redacted]

Dear [redacted]

During the preceding 6 months our security staff has been monitoring your husbands activities while in our store. The list below details his offences, all of which have been verified by our surveillance cameras and we have retained copies on tape.

We have repeatedly given your husband verbal warnings while he is in this store and he has subsequently ignored them. He replied to these warning with rudeness and the response "while the wife shops here I will come here too". We are therefore forced to ban you, your husband and your family from this store.

The following list details your husbands activates in this store over the past six months.

June 15: Took 24 boxes of condoms and randomly put them in people's carts when they weren't looking.

July 2: Set all the alarm clocks in House wares to go off at 5-minute intervals.

July 7: Made a trail of tomato juice on the floor leading to the rest rooms.

July 19: Walked up to an employee and told her in an official tone, 'Code 3' in house wares and watched what happened.

August 4: Went to the Service Desk and asked to put a bag of M&M's on lay-buy.

September 14: Moved a 'Caution - WET FLOOR' sign to a carpeted area.

September 15: Set up a tent in the camping department and told other shoppers he'd invite the in if they'll bring pillows.

September 23: If any staff offers him assistance he begins to cry and asks, "Why can't you people just leave me alone?"

October 4: Looked right into the security camera; used it a mirror, and picked his nose.

November 10: While in the gun department, asked the clerk if he knows where the antidepressants are.

December 3: Darted around the store suspiciously loudly humming the "Mission Impossible" theme.

December 6: In the auto department, practiced his "Madonna Look" using different size funnels.

December 18: Hide in a clothing rack and when people browse through, yelled "PICK ME!" "PICK ME!"

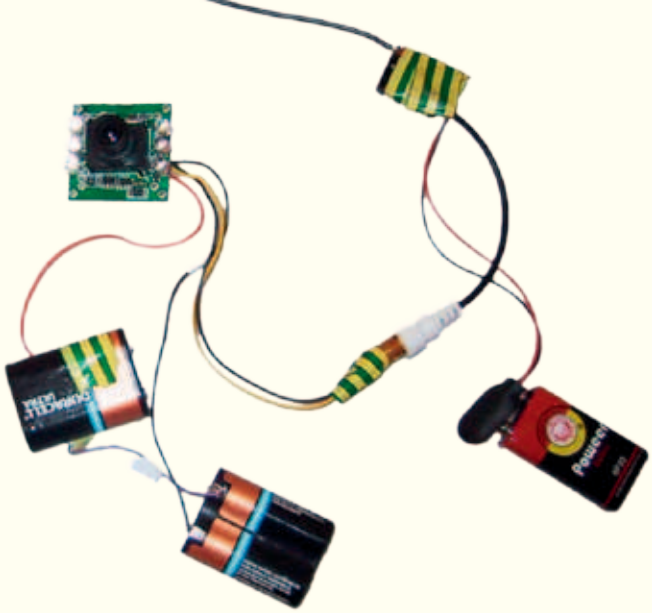
December 21: When an announcement came over the loud speaker, he assumes the fetal position and screams "NO! NO! It's those voices again!"

December 23: Went in the fitting room, shut the door and waited a while; then yelled, very loudly, "There is no toilet paper in here!

[redacted]

[redacted]
Store Manager

TYPOS CUSTOMERS
TY/QUIS CUSTODIET





THE SPY SCHOOL

The Spy School scrutinises the public–private borderline of post–9/11 daily life in a climate where the ethic of surveillance is in the ascendancy and the development of its technologies in overdrive.

Exercise #1: Tel Aviv, Israel, November 2002
Exercise #2: Hull, UK, January 2003
Exercise #3: Tallinn, Estonia, June 2003
Exercise #4: The *Faceless* project, London, 2002–07
Exercise #5: Who Is Watching The Watchers?, 2004

Exercise #1: Tel Aviv, Israel, November 2002

For *VideoZone*, the first video art biennale in Israel, *The Spy School* traveled to Tel Aviv to intervene in the opening night party at the Digital Art Lab, Holon, Tel Aviv.

Raiding the spectrum, *The Spy School* gathers information, throws it in to the mix, and sends it back out through the airwaves. Radio-talk, phone-talk, CCTV, your whispered conversations and surreptitious glances, captured, reconfigured, rebroadcast. You arrive at the party to find yourself already there, echoed in the soundtrack and projections. *The Spy School* infiltrates scenes with its human avatar, wired for sound and image and feeding the DJ and VJ with angles on the party-goers. And there's a performer on the floor, ranging through moves and masks – but no one's quite sure who's watching who.

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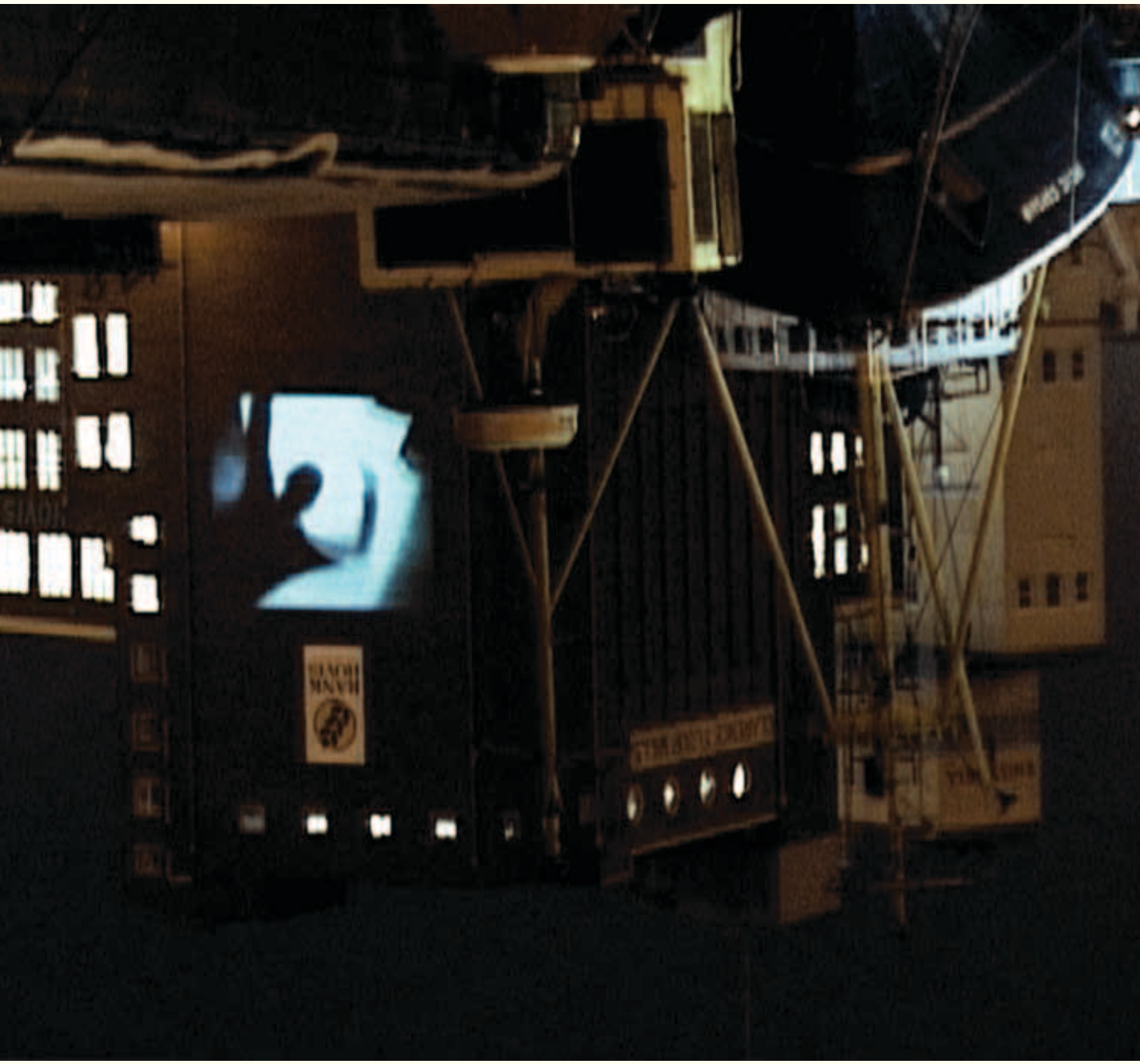
ambientTV.NET
2002–07

The Spy School Exercise #1
party intervention
piece by Manu Luksch &
Mukul Patel, with Michael
Uwemedimo, Gavin Starks
and support by Jaromil
[dyne.org]

The Spy School Exercise #2
realisation + video:
Manu Luksch
performance: Michael
Uwemedimo, Lizzie Tuckey
sound: Mukul

***Above: Miniature wireless cameras used for* Spy School Exercise #2**

Left: Letter forwarded to Manu Luksch by a visitor to Gallery Barry Keldoulis while* The Spectral Children *was on show





Exercise #2: *Hull, UK, January 2003*

Commissioned by Hull Time-Based Arts, *The Spy School Exercise #2* took place outside the house of William Wilberforce, a leader of the Abolitionist movement, in the important British slave trade harbour of Kingston upon Hull.

Two capoeiristas, Michael Uwemedimo and Lizzie Tuckey, play outdoors, in the dark in front of the Wilberforce House Museum on the River Hull. Their costumes incorporate wireless, miniature, night-vision-enabled cameras that trace and transmit their movements. The work is a thematic exploration of the contradictions and conjunction of spectacle and surveillance, and a demonstration of the ruses by which 'data-subjects' can slip their shadows, masking their movements and intentions, while remaining highly visible. The capoeiristas were 100 m from the receivers, at the limit of the useful range, where the signal was seasoned with noise.

Capoeira is a discourse of dissimulation and resistance. Drawing on martial, musical, religious and dance forms from communities along the slave routes that reached from coast to coast across the Atlantic, deep into the African and Brazilian interiors, its martial implications had to be disguised as recreational, quasi-religious dance forms. It is a ruse, a camouflage, double-talk. When capoeira was outlawed, the stakes were raised – execution and amputation were among the penalties for playing – it became a form that had to hide itself, emerge, take shape, and disperse. Strategies of dissimulation characterise the encounter between participants as well as those between the form and structures of societal authority. Each dancer is a shadow that traces the motion of the other, suddenly to slip out of synch, to surprise and trip the body that cast it.

A video recording of *Exercise #2* was shown on cable TV (Kingston Interactive, Timebase Channel) and projected in public space. Behind the projection surface, the huge south-facing facade of the Rank Hovis Building, Lord Rank had carried out early media experiments. A filmmaker and mogul, among his fascinations were the possibilities of the production and exhibition of 'religious films'.

Exercise #2 ***screening on the Rank Hovis Building, Hull, 2003***

Exercise #3: *Tallinn, Estonia, June 2003*

MA students at the E-Media Centre of the Eesti Kunstiakadeemia developed new works over four days of intensive tactical media workshops led by Manu Luksch and Mukul Patel. The workshops focussed on the boundaries between the public and the private, and the mediation that occurs all the time, everywhere in an age of increasing surveillance and data mining by states and corporations. The artists used surveillance technologies including miniature wireless cameras. Works were displayed on the large electronic billboard on the EKA building at Tartu mnt. 1, and streamed online.

Exercise #4: *The* Faceless *Project, London, 2002–08*

The *Faceless* project is a series of works that intervenes in the quotidian recording and processing of CCTV (closed-circuit television) surveillance camera images in the UK, and probes the laws surrounding these images – particularly the UK Data Protection Act (DPA) 1998. Apart from a 50 minute sci-fi film produced under the constraints of the *Manifesto for CCTV Filmmakers*, the project has resulted in works including

- an online DIY toolkit for making 'subject access requests' under the DPA
- an archive of research materials, records of communication with data controllers, and other documentation
- *The Eye* (a choreography workshop for surveilled space, led by the Ballet Boyz, Billy Trevitt and Michael Nunn)
- *I wish to apply, under the Data Protection Act, for any and all CCTV images of my person held within your system. I was present at [place] from approximately [time] onwards on [date].* (lightboxes with letters received from data controllers)
- *The Spectral Children* (a multiple-screen video installation for galleries), and
- *FRAMED* (a series of large-scale photographic prints).

FACELESS (MANU LUKSCH, 2007, UK/AUSTRIA)
The film is an assemblage of recordings from existing CCTV surveillance cameras in London – the most heavily surveilled city on Earth – obtained under the terms of the DPA (1998). The process of accessing these images also activated other layers of legislation concerning the recordings, including Article 8 of the Human Rights Act (1998), the Freedom of Information Act

(2000), and aspects of copyright and image rights. In *Faceless*, the CCTV image is treated as a 'legal readymade' – an *objet trouvé* (after Duchamp) that has been annexed and redacted according to the law.

The scenario of *Faceless* reflects and renders visible the formal qualities of the images both as image, and as legal readymade: the RealTime calendar of the film derives from the time-lapse nature of the recordings and the often multiple, conflicting timecodes embedded within the frames, while the facelessness of the world is rooted in the erasure of the faces of third parties in the footage (as stipulated by law for the protection of privacy). In its fictive aspect, the scenario resembles that of Yevgeny Zamyatin's dystopian novel *We* (1924), although in *Faceless* it is derived under real-world constraints.

Plot development was an open process, in parallel with and parasitical upon the process of image acquisition. Since CCTV cameras are not permitted to record sound, there is no dialogue; only music, and a voiceover by Tilda Swinton in hommage to Chris Marker's *La Jetée*.

SUBJECT ACCESS REQUESTS FOR CCTV RECORDINGS
Many corporations and organisations (data controllers) collect and store personal information about others (data subjects) on computer or in paper files. This information can be used to make decisions that significantly affect the data subjects. The Data Protection Act (DPA) allows you to find out what information is held on you as a data subject in computer and some paper records.

In 1998, CCTV systems were brought into the remit of the DPA. In order to obtain copies of any CCTV recordings in which you feature, you must determine the identity of the relevant data controller and address a 'subject access request' letter to them. The DPA stipulates that the contact details of data controllers be displayed in the zone covered by CCTV. Data controllers are obliged to store any recordings for a declared retention period, and to release a copy to a data subject who requests them and pays the statutory fee (£10).

Note: the DPA (1998) has recently been reinterpreted in the light of court rulings in, notably, *Peck vs The United Kingdom* (2003) and *Durant vs Financial Services Authority* (2003). This has placed an onus of proving the 'biographical relevance' of the recordings on the data subject.



1

[1] www.darpa.mil

Exercise #5: Who Is Watching The Watchers?, *2004*

A POST-9/11 T-SHIRT COLLECTION

Ambient Information Systems (AIS) launches its September 11 collection in hommage to the recently discontinued Total Information Awareness (TIA) logo of the US Defence Advanced Research Projects Agency (DARPA)[1].

The TIA logo, a potent symbol of security and freedom, would have been lost to history were it not for its timely appropriation by AIS.

TIA is a program of DARPA's Information Awareness Office (IAO), its mission to integrate 'innovative information technologies for detecting and pre-empting foreign terrorist activities against Americans.' The original logo was discontinued because it had 'become a lightning rod' and was 'needlessly diverting time and attention from critical tasks.' The Total Information Awareness program has now been renamed Terrorism Information Awareness Systems. DARPA runs numerous other research programs, including FutureMAP (a futures market where traders were invited to gamble on political events).

The original TIA logo features an eye that 'scans the globe for evidence of terrorist planning and is focused on the part of the world that was the source of the attacks' of 9/11. The Ambient Information Systems T-Shirt features a slightly modified version of the TIA logo. Notably, the eye is refocused and the motto 'Scienta est potentia' – Knowledge is power – is replaced by 'Quis custodiet ipsos custodes' – *Who is Watching the Watchers?*

1
Watchers-watchers-watcher
Photo: Peter Grech

2
Original TIA logo

3
TIA logo as modified by AIS

Right: Excerpt from a DARPA public information document

Following pages, left: Subject access request letter

Right: Faceless *film poster*



2



3

Question 14: When is it anticipated that TIA will be ready for use?

Answer: Research under the TIA program is planned for several years. An operational prototype TIA network is the goal of this multiyear effort. During the first 36 months, a range of ideas will be developed via limited demonstrations and preliminary prototypes. During the final 24 months, the most promising research avenues will be extended to support transition of a scalable, leave-behind network prototype. At the end of the multiyear program, Congress will have decided if and how the TIA network will be deployed or further matured.

Question 15: What does the IAO logo mean? Why has it disappeared from the web site?

Answer: DARPA offices have traditionally designed and adopted logos. However, because the IAO logo has become a lightning rod and is needlessly diverting time and attention from the critical tasks of executing that office's mission effectively and openly, we have decided to discontinue the use of the original logo.

For the record, the IAO logo was designed to convey the mission of that office; i.e., to imagine, develop, apply, integrate, demonstrate, and transition information technologies, components, and prototype, closed-loop information systems that will counter asymmetric threats by achieving total information awareness useful for preemption, national security warning, and national security decision making. On an elemental level, the logo is the representation of the office acronym (IAO); the eye above the pyramid represents "I," the pyramid represents "A," and the globe represents "O." In the detail, the eye scans the globe for evidence of terrorist planning and is focused on the part of the world that was the source of the attacks on the World Trade Center and the Pentagon. *Scientia est potentia* means "Knowledge is power." With the enabling technologies being developed by the office, the United States will be empowered to implement operational systems to thwart terrorist attacks like those of September 11, 2001.

The unfinished pyramid and the eye depicted in the logo were taken directly from the reverse side of the Great Seal of the United States of America (for a history of the seal, see http://www.heraldica.org/topics/usa/usheroff.htm). Both sides of the seal also appear on the back of the U.S. $1 bill.

Question 16: How was John Poindexter selected as the Director of DARPA's Information Awareness Office?

Answer: Dr. Poindexter was selected as the Information Awareness Office Director based on a number of factors: his prior experience with DARPA's Project Genoa and the national security

RECEIVED
-2 SEP 2003

MANU LUKSCH
[redacted]

28 August 2003

The security and safety manager,
[redacted]

Dear Sir / Madam,

I wish to apply, under the Data Protection Act, for any and all CCTV images of my person held within your system. On 27 August 2003, I was present at the ATM 254 Seven Sisters Road, at approx. 20.15 p. m.

For ease of identification, I enclose a photo of myself below. I was wearing white trousers and a white T-Shirt with aqua blue sleeves.



IN AN EERILY FAMILIAR CITY, A CALENDAR REFORM HAS DISPENSED WITH THE PAST AND THE FUTURE, LEAVING CITIZENS FACELESS, WITHOUT MEMORY OR ANTICIPATION. UNIMAGINABLE HAPPINESS ABOUNDS – UNTIL A WOMAN RECOVERS HER FACE...



LONDON HAS THE HIGHEST DENSITY OF CCTV SURVEILLANCE CAMERAS ON EARTH. *FACELESS* USES RECORDINGS FROM THESE CAMERAS, OBTAINED UNDER THE UK DATA PROTECTION ACT, AS 'LEGAL READYMADES' TO CONSTRUCT A STRANGE YET PLAUSIBLE WORLD.

«Il y a deux façons de concevoir le cinéma du réel. La première est de prétendre donner à voir le réel. La seconde est de se poser le problème du réel. De même il y avait deux façons de concevoir le cinéma-vérité. La première était de prétendre apporter la vérité. La seconde était de se poser le problème de la vérité.»

«Or nous devons le savoir, le cinéma de fiction est dans son principe beaucoup moins illusoire, et beaucoup moins menteur que le cinéma dit documentaire, parce que l'auteur et le spectateur savent qu'il est fiction, c'est-à-dire qu'il porte sa vérité dans son imaginaire. Par contre, le cinéma documentaire camoufle sa fiction et son imaginaire derrière l'image reflet du réel. Or, nous devons le savoir de plus en plus profondément, la réalité sociale se cache et se met en scène

d'elle-même, devant le regard d'autrui et surtout devant la caméra. La réalité sociale s'exprime à travers des rôles. Et en politique, l'imaginaire est plus réel que le réel. C'est pourquoi, c'est sous le couvert du cinéma du réel qu'on nous a présenté, proposé, voire imposé les plus incroyables illusions, c'est que, dans les contrées merveilleuses dont on ramenait l'image exaltante, la réalité sociale était mise en scène et occultée par le système politique régnant et transfigurée dans les yeux hallucinés du cinéaste.»

«C'est-à-dire que le cinéma qui se pose les plus graves et les plus difficiles problèmes par rapport à l'illusion, l'irréalité, la fiction, est bien le cinéma du réel, dont la mission est d'affronter le plus difficile problème posé par la philosophie depuis deux millénaires, celui de la nature du réel.»

Edgar Morin, from his 1980 introduction to* Cinéma Vérité *at Centre Pompidou

7/QUIS CUSTODIET
IPSOS CUSTODES

ANGSTBILDER GEGEN DIE ANGST

Angst löscht die Gegenwart aus. Sie speist sich aus einer Vergangenheit, die sich unkontrolliert über die Gegenwart hinweg ausbreitet und von der Zukunft Besitz ergreift. Diese Angst zu bannen, indem man Vergangenheit und Zukunft ausschaltet, das ist das Versprechen des Überwachungsstaates. Ein Versprechen, das die permanente Observation des öffentlichen Raums zu legitimieren scheint und den Traum vom sorgenfreien Dasein im abgeschotteten Jetzt in einen real gewordenen Alptraum verkehrt.

Manu Luksch erzählt von diesem Alptraum im Vokabular des Science Fiction Films – und mit dem Bildmaterial, das sie den Betreibern von Londoner Videoüberwachungsanlagen unter Berufung auf ein Datenschutzgesetz abgerungen hat. In fantastisch-poetischer Verkettung lässt sie beklemmend vertraute Stadtansichten zum Schauplatz eines Schicksalsszenarios werden, in dem eine Frau den schockhaften Ausbruch aus der existenziellen Verfasstheit der „Echtzeit"-Erfassung erlebt.

Gesichts- und geschichtslos wie die Menschen, die auf den realen, von der Betreibergesellschaft CCTV herausgegebenen Videoaufnahmen (aufgrund eines Gesetzes zum Schutz der Privatheit) unkenntlich gemacht wurden, taucht die Protagonistin von *Faceless* mit ihrem plötzlich wiedererlangten Gesicht aus einem Datendasein hervor und in eine vergessen geglaubte Geschichte ein.

In spiegelbildlicher Umkehrung des Befreiungsakts, in welchem das Trauma dieser Bewusstwerdung letztlich mündet, traumatisiert *Faceless* über die ebenso stimmungsvoll wie unheimlich bebilderte Metaerzählung einer Gesellschaft, deren Selbstbewusstsein im Zerrbild ihrer medialen Hyperpräsenz zu verblassen droht.



Robert Buchschwenter
2007

English Translation:
Steve Wilder
Traduction Français:
Françoise Guiguet

IMAGES OF FEAR, AGAINST FEAR

Fear blots out the present. It feeds on a past that spills over uncontrollably into the present; it takes possession of the future. Vanquishing this fear by erasing past and future is the promise of the Big Brother state. This promise is contrived to legitimise the constant observation of public space, which turns the dream of carefree existence in an isolated present into a nightmarish reality.

Manu Luksch employs the vocabulary of science fiction film to draw us into this nightmare. Crucially, she uses only images obtained from the operators of CCTV video surveillance systems in London, under the terms of a British law governing access to data. In a fantastic and poetic concatenation, she transforms oppressively familiar views of the city into locations of a fateful scenario, in which a woman is thrust into a startling escape from the perpetually administered present of 'RealTime'.

At first as faceless and devoid of history as the other individuals anonymised in the recordings by the CCTV operators (to comply with privacy legislation), the film's protagonist abruptly regains her face, and casts off her former existence as a Bit of data to dive into her stolen past.

In a mirror image of the failed act of liberation that the trauma of this realization incites, *Faceless* succeeds in traumatising its viewers by means of an equally atmospheric and weirdly illuminated metanarrative – that of a society whose self-understanding is occluded by its dazzling media hyperpresence.

DES IMAGES DE LA PEUR POUR VAINCRE LA PEUR

La peur anéantit le présent. Elle se nourrit d'un passé qui, sans crier gare, submerge le présent et prend possession de l'avenir. Conjurer cette peur en abolissant passé et avenir, telle est la promesse de l'État de surveillance. Une promesse qui tend à légitimer l'observation permanente de l'espace public et transforme le rêve d'une existence sans problème dans un immédiat étanche en cauchemar devenu réalité.

Manu Luksch nous conte ce cauchemar en utilisant le vocabulaire des films de science fiction – et le matériau visuel qu'elle a réussi à acquérir auprès des contrôleurs du système londonien de vidéo surveillance, en vertu de la loi britannique sur la protection des données. Dans un enchaînement fantastico-poétique, elle transforme des vues de la ville, d'une familiarité troublante, en théâtre d'un scénario fatidique: une femme est brutalement projetée hors du «monde du temps réel» qui était soumis au contrôle absolu d'un système anonyme.

D'abord sans visage et sans vécu, comme les personnes rendues non identifiables sur les enregistrements vidéo authentiques fournis par la société de contrôle CCTV (conformément à la loi britannique sur la protection de la vie privée), la protagoniste de *Faceless*, retrouvant soudain son visage, se trouve rejetée hors de son existence de donnée et plongée dans une histoire qu'on pensait oubliée.

Quand la prise de conscience traumatique conduit finalement au renversement en son contraire de l'acte libérateur, *Faceless* bouleverse en faisant, par le biais d'images aussi évocatrices qu'angoissantes, le métarécit d'une société dont l'identité est en passe de disparaître dans l'image déformée de son hyperprésence médiatique.

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the filmmaker as symbiont:

opportunistic infections of the surveillance apparatus

Manifesto for CCTV filmmakers declares a set of rules, establishes effective procedures, and identifies issues for filmmakers using pre-existing CCTV (surveillance) systems as a medium in the UK. The manifesto is constructed with reference to the Data Protection Act 1988 and related privacy legislation that gives the subjects of data records access to copies of the data. The filmmaker's standard equipment is thus redundant; indeed, its use is prohibited. The manifesto can be adapted for different jurisdictions.

* * *

MANIFESTO FOR CCTV FILMMAKERS

1. GENERAL

The filmmaker is not permitted to introduce any cameras or lighting into the location.

2. SCRIPT

A protagonist ("data subject") is required to feature in all sequences.

Data Protection Act 1998; 1998 Chapter 29; Part II Section 7(1).
[A]n individual is entitled –
(a) to be informed by any data controller whether personal data of which that individual is the data subject are being processed by or on behalf of that data controller,
(b) if that is the case, to be given by the data controller a description of –
(i) the personal data of which that individual is the data subject,
(ii) the purposes for which they are being or are to be processed, and
(iii) the recipients or classes of recipients to whom they are or may be disclosed,
(c) to have communicated to him in an intelligible form –
(i) the information constituting any personal data of which that individual is the data subject, and
(ii) any information available to the data controller as to the source of those data,
(d) where the processing by automatic means of personal data of which that individual is the data subject for the purpose of evaluating matters relating to him such as, for example, his performance at work, his creditworthiness, his reliability or his conduct, has constituted or is likely to constitute the sole basis for any decision significantly affecting him, to be informed by the data controller of the logic involved in that decision-taking.

The documented activity of the protagonist must qualify as personal or sensitive data. The filmmaker is to establish this by locating a CCTV camera and circumscribing the field of action for the actors relative to it, so that incidents of biographical relevance (i.e., that reveal personal data) occur in the frame.

ICO CCTV systems and the Data Protection Act JB v.5 01/02/04
2. The court decided that for information to relate to an individual (and be covered by the DPA) it had to affect their privacy. To help judge this, the Court decided that two matters were important: that a person had to be the focus of information, the information tells you something significant about them.

The provisions of the 1998 Act are based on the requirements of a European Directive, which at, Article 2, defines, personal data as follows:
"Personal data" shall mean any information relating to an identified or identifiable natural person; an identifiable person is one who can be identified, directly or indirectly, in particular by reference to an identification number or to one or more factors specific to his physical, physiological, mental, economic, cultural or social identity.
The definition of personal data is not therefore limited to circumstances where a data controller can attribute a name to a particular image. If images of distinguishable individuals' features are processed and an individual can be identified from these images, they will amount to personal data.

All people other than the protagonist ("third parties") will be rendered unidentifiable on the data obtained from the CCTV operators. Typically, operators blur or mask out faces of third parties. The filmmaker is to consider the visual impact of this manipulation, and to establish a rule for the handling of footage delivered with ineffectual masking or blurring – for example, reporting the offence.

Right to Privacy in Article 8 of the Human Rights Act 1998:
RIGHT TO RESPECT FOR PRIVATE AND FAMILY LIFE
1. Everyone has the right to respect for private and family life, his home and his correspondence.
2. There shall be no interference by a public authority with the exercise of this right except such as in accordance with the law and is necessary in a democratic society in the interests of national security, public safety or the economic well being of the country, for the prevention of disorder or crime, for the protection of health or morals, or for the protection of the rights or freedoms of others.

DPA1998
4. On the other hand, the disclosure of third party information in compliance with a subject access request may also expose the data controller to complaint or action by the third party, for example [...] for breach of confidence.
6. The data controller should consider to what extent it is possible to communicate the information sought without disclosing any third party information [...] This might be achieved by editing the information to remove names or other identifying details.

3. LOCATION

The filmmaker is to choose locations covered by multiple cameras operated by a large business, private security firm or public authority – or, if operated by a small retailer, cameras that can be panned or zoomed remotely. Locations may be mobile (e.g., public bus).

ICO CCTV systems and the Data Protection Act JB v.5 01/02/04
If you have just a basic CCTV system your use may no longer be covered by the DPA.
[...] Small retailers would not be covered who
– only have a couple of cameras,
– can't move them remotely,
– just record on video tape whatever the camera picks up,
– only give the recorded images to the police to investigate an incident in their shop.

For every camera, the operator's name and contact details are to be noted.

Code of practice issued by the Data Protection Commissioner, under Section 51(3)(b) of the Data Protection Act 1998, 07/2000
7. Signs should be placed so that the public are aware that they are entering a zone which is covered by surveillance equipment.
The signs should contain the following information:
Identity of the person or organisation responsible for the scheme.
The purposes of the scheme.
Details of whom to contact regarding the scheme.
(First Data Protection Principle).

4. FOOTAGE REQUESTS

After each shoot, the filmmaker is to send a written request ("subject access request letter") to the CCTV operator ("data controller") to ensure that the data recovery process can be initiated while the recordings are still archived. (Mandatory retention periods vary.)

Code of practice issued by the Data Protection Commissioner, under Section 51(3)(b) of the Data Protection Act 1998, 07/2000
1. Once the retention period has expired, the images should be removed or erased (Fifth Data Protection Principle).

The subject access request letter is to state the place and time of the recording and include a picture of the protagonist (wearing the same clothes if possible) and a cheque for £10 (the maximum fee chargeable). Letters should be sent by a secure system that provides

evidence of delivery. (Some data controllers may require the notarisation of the letter to legally establish identity.)

Data Protection Act 1998; 1998 Chapter 29, Part II Section 7(2)
A data controller is not obliged to supply any information under subsection (1) unless he has received –
(a) a request in writing, and
(b) except in prescribed cases, such fee (not exceeding the prescribed maximum) as he may require.

The filmmaker is to allow a maximum 40 days after sending the data request for an initial response.

Code of practice issued by the Data Protection Commissioner, under Section 51(3)(b) of the Data Protection Act 1998, 07/2000
A data controller must comply with a subject access request promptly, and in any event within forty days of receipt of the request or, if later, within forty days of receipt of: the information required (i.e. to satisfy himself as to the identity of the person making the request and to locate the information which that person seeks); and the fee.

The filmmaker is to establish a set of rules for handling the various formats in which the data may be sent (video tape, DVD-video, digital files encoded with proprietary codecs, hard copies of frames, etc.).

5. SOUND

CCTV systems are not permitted to record sound. The filmmaker is to establish a set of rules for the soundtrack (if any) of the movie.

6. DISTRIBUTION

Footage received is subject to complex copyright issues. The filmmaker is to take legal advice and establish a strategy.

* * *

Manu Luksch & Mukul Patel
2007

CHASING THE DATA SHADOW

First published in Stocker, G. & Schöpf, C., eds., *Goodbye Privacy: Ars Electronica 2007* (Ostfildern: Hatje Cantz Verlag, 2007)

Stranger than fiction

Remote-controlled UAVs (Unmanned Aerial Vehicles) scan the city for anti-social behaviour. Talking cameras scold people for littering the streets (in children's voices). Biometric data is extracted from CCTV images to identify pedestrians by their face or gait. A housing project's surveillance cameras stream images onto the local cable channel, enabling the community to monitor itself.

These are not projections of the science fiction film that this text will discuss, but techniques that are used today in Merseyside, Middlesborough, Newham and Shoreditch in the UK. In terms of both density and sophistication, the UK leads the world in the deployment of surveillance technologies. With an estimated 4.2 million CCTV cameras in place, its inhabitants are the most watched in the world[1]. Many London buses have five or more cameras inside, plus several outside, including one recording cars that drive in bus lanes.

[1] 'A Report on the Surveillance Society'. For the Information Commissioner by the Surveillance Studies Network, September 2006, p.19. Available from www.ico.gov.uk

But CCTV images of our bodies are only one of many traces of data that we leave in our wake, voluntarily and involuntarily. Our vehicles are tracked using Automatic Number Plate Recognition systems, our movements revealed via location-aware devices (such as cell phones), the trails of our online activities recorded by ISPs, our conversations overheard by Echelon, shopping habits monitored through loyalty cards, individual purchases located using RFID tags, and our meal preferences collected as part of PNR (flight passenger) data. Our digital selves are many-dimensional, alert, unforgetting.

Increasingly, these data traces are arrayed and administered in networked structures of global reach. It is not necessary to posit a totalitarian conspiracy behind this accumulation — data mining is an exigency of both market efficiency and bureaucratic rationality. Much has been written on 'the surveillance society' and 'the society of control', and it is not the object here to construct a general critique of data collection, retention and analysis. However it should be recognised that, in the name of efficiency and rationality — and, of course, security — an ever-increasing amount of data is being shared (or leaked)

DIE JAGD NACH DATENSCHATTEN

Manu Luksch & Mukul Patel
2007

Aus dem Englischen von
Martina Bauer

Seltsamer als jede Fiktion

Ferngesteuerte, unbemannte Luftfahrzeuge überfliegen die Stadt auf der Suche nach unsozialem Verhalten. Sprechende Kameras rufen (mit Kinderstimmen) Menschen zur Ordnung, die Abfälle auf die Straßen werfen. Bildern der Videoüberwachung werden biometrische Daten entnommen, um Passanten über ihr Gesicht oder ihren Gang zu identifizieren. Die Überwachungskameras einer Wohnanlage werden im internen Kabelfernsehen ausgestrahlt, und ermöglichen den Bewohnern, sich selbst zu kontrollieren.

Das sind keine Szenen aus dem Science Fiction Film, der Anlaß dieses Textes ist, sondern Techniken, die heute in Großbritannien in Merseyside, Middlesborough, Newham und Shoreditch zum Einsatz kommen. Mit einer geschätzten Anzahl von 4,2 Millionen CCTV-Kameras sind die Einwohner Großbritanniens die meist beobachteten der Welt[1]. Viele Londoner Busse sind im Inneren mit fünf oder mehr Kameras bestückt, weitere sind außen angebracht, wobei eine die Autos aufnimmt, die die Busspur benützen.

Doch die Bilder der Überwachungskameras sind nur eine der vielen Datenspuren, die wir – freiwillig oder unfreiwillig – hinterlassen. Unsere Autofahrten werden mittels Nummernschilderkennung aufgezeichnet, dank der location-awareness der Endgeräte (wie etwa Mobiltelefone) werden unsere Bewegungen registriert, die Spuren unserer Online-Aktivitäten von Internetdienstanbietern aufgezeichnet, unsere Gespräche von Echelon abgehört, Einkaufsgewohnheiten per Kundenkarten überwacht, individuelle Einkäufe über RFID-Kennungen (Radio Frequency Identification, Identifizierung über Radiowellen) und unsere Ernährungsgewohnheiten mit den Fluggastdaten erfasst. Unsere digitalen Alter Egos sind mehrdimensional, wachsam und vergessen nie etwas.

Diese Datenspuren werden zunehmend in global vernetzten Datenbanken gehortet und verwaltet. Man muss nicht unbedingt eine totalitäre Verschwörung hinter dieser Datenakkumulation vermuten – die Auswertung von Daten ist sowohl ein Erfordernis der Markteffizienz als auch der bürokratischen Rationalität. Über die „Überwachungsgesellschaft“ und die „kontrollierte

[1] Surveillance Studies Network „A Report on the Surveillance Society“ (ICO: September 2006), S. 19. Zu beziehen über www.ico.gov.uk



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between the keepers of such seemingly unconnected records as medical histories, shopping habits, and border crossings. Legal frameworks intended to safeguard a conception of privacy by limiting data transfers to appropriate parties exist. Such laws, and in particular the UK Data Protection Act (DPA, 1998), are the subject of investigation of the intermedia project *Faceless*.

From Act to Manifesto

I wish to apply, under the Data Protection Act, for any and all CCTV images of my person held within your system. I was present at [place] from approximately [time] onwards on [date].[2]

For several years, ambientTV.NET conducted a series of exercises to visualise the data traces that we leave behind, to render them into experience and to dramatise them, to 'watch those who watch us'. These experiments, scrutinising the boundary between public and private in post-9/11 daily life, were run under the title *The Spy School*. In 2002, *The Spy School* carried out an exercise to test the reach of the UK Data Protection Act as it applies to CCTV image data.

The Data Protection Act 1998 seeks to strike a balance between the rights of individuals and the sometimes competing interests of those with legitimate reasons for using personal information. The DPA gives individuals certain rights regarding information held about them. It places obligations on those who process information (data controllers) while giving rights to those who are the subject of that data (data subjects). Personal information covers both facts and opinions about the individual[3].

The original DPA (1984) was devised to permit and regulate access to computerised personal data such as health and financial records. A later EU directive broadened the scope of data protection and the remit of the DPA (1998) extended to cover, amongst other data, CCTV recordings. In addition to the DPA, CCTV operators must comply with other laws related to human rights, privacy, and procedures for criminal investigations, as specified in the *CCTV Code of Practice*[4].

As the first 'subject access request' letters were successful in delivering CCTV recordings for *The Spy School*, it then became pertinent to investigate how robust the legal framework was.

[2] From the template for 'subject access requests' used for Faceless.

[3] Data Protection Act Factsheet available from the UK Information Commissioners Office www.ico.gov.uk

[4] See www.ico.gov.uk

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Transport for London Poster, 2002

2
Manifesto for CCTV Filmmakers, *Broadway Market, London 2008*
Photo: Mukul Patel

Gesellschaft“ wurde bereits viel geschrieben, und es ist nicht unsere Absicht, in diesem Rahmen eine allgemeine Kritik von Datensammlung, –vorratsspeicherung und –analyse zu leisten. Doch sollten wir nicht die Augen davor verschließen, dass im Namen von Effizienz und Rationalität – und natürlich der Sicherheit – eine ständige wachsende Datenmenge zwischen den Bewahrern scheinbar nicht vernetzter Aufzeichnungen wie unserer Krankengeschichten, Einkaufsgewohnheiten und Grenzübertritten ausgetauscht wird. Es gibt gesetzliche Rahmenbedingungen zum Schutz der Privatheit, die Datenübertragungen auf die zugehörigen Parteien beschränken. Es sind diese Gesetze und insbesondere das britische Datenschutzgesetz (DPA 1998), die der Films *Faceless* durch seine Machart untersucht.

Vom Gesetz zum Manifest

Ich möchte gemäß DPA 1998 sämtliche Videobilder meiner Person, die von Ihrer Videoüberwachungsanlage aufgezeichnet wurden, beantragen. Ich war am [Datum] um [Zeit] in [Ort] anwesend.[2]

Unter dem Namen „ambientTV.NET“ betrieb Manu Luksch mehrere Jahre lang eine Reihe von Workshops zur Visualisierung von Datenspuren, um diese in dramatisierter Weise erfahrbar zu machen und „jene zu beobachten, die uns beobachten“. Diese Experimente, in denen die Grenze zwischen Öffentlichkeit und Privatheit im Alltagsleben nach 9/11 eingehend untersucht wurde, liefen unter dem Titel *The Spy School*. Im Jahr 2002 wurde in *The Spy School* ein Experiment durchgeführt, um die Wirksamkeit des UK Data Protection Act in Bezug auf CCTV-Bilddaten zu testen.

Der Data Protection Act 1998 versucht, eine Balance zwischen den Rechten des Einzelnen und den mitunter konkurrierenden Interessen jener herzustellen, die legitime Gründe haben, personenbezogene Daten zu verwenden. Der DPA gesteht Einzelpersonen gewisse Rechte hinsichtlich der über sie gesammelten Daten zu. Er erlegt jenen, die Daten verarbeiten (den verantwortlichen Stellen) Verpflichtungen auf, während er jenen, deren Datenprofil erstellt wird (die Betroffenen), Rechte zugesteht. Personenbezogene Informationen umfassen sowohl Fakten als auch Meinungen über Einzelpersonen[3].

Der DPA (1984) wurde ursprünglich ausgearbeitet, um den Zugang zu computerisierten personenbezogenen Daten, wie



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[2] Aus dem für *Faceless* verwendeten Vordruck „Antrag eines Betroffenen um Zugriff auf Videodaten“.

[3] Der Gesetzesauszug zum DPA ist über das UK Information Commissioner’s Office (ICO) zu beziehen: www.ico.gov.uk
Der vollständige Text des DPA (1998) ist zu beziehen über www.opsi.gov.uk/ACTS/acts1998/19980029.htm



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The *Manifesto for CCTV Filmmakers* was drawn up, permitting the use only of recordings obtained under the DPA. Art would be used to probe the law.

A legal readymade

Vague spectres of menace caught on time-coded surveillance cameras justify an entire network of peeping vulture lenses. A web of indifferent watching devices, sweeping every street, every building, to eliminate the possibility of a past tense, the freedom to forget. There can be no highlights, no special moments: a discreet tyranny of 'now' has been established. 'Real time' in its most pedantic form.[5]

[5] Ian Sinclair *Lights out for the territory* (London: Granta 1998), p. 91

Faceless is a CCTV science fiction fairy tale set in London, the city with the greatest density of surveillance cameras on Earth. The film is made under the constraints of the *Manifesto* — images are obtained from existing CCTV systems by the director/protagonist exercising her rights as a 'surveilled person' under the DPA. Obviously the protagonist has to be present in every frame. To comply with privacy legislation, CCTV operators are obliged to render other people in the recordings unidentifiable — typically by erasing their faces, hence the 'faceless' world depicted in the film. The scenario of *Faceless* thus derives from the legal properties of CCTV images.

RealTime orients the life of every citizen. Eating, resting, going to work, getting married—every act is tied to RealTime. And every act leaves a trace of data — a footprint in the snow of noise...[6]

[6] *Faceless* (2007).

The film plays in an eerily familiar city, where the reformed RealTime calendar has dispensed with the past and the future, freeing citizens from guilt and regret, anxiety and fear. Without memory or anticipation, faces have become vestigial — the population is literally faceless. Unimaginable happiness abounds — until a woman recovers her face.... There was no traditional shooting script: the plot evolved during the four-year long process of obtaining images. Scenes were planned in particular locations, but the CCTV recordings were not always obtainable, so the story had to be continually rewritten.

Faceless treats the CCTV image as an example of a legal readymade (*objet trouvé*). The medium, in the sense of 'raw materials that are transformed into artwork', is not adequately

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Still from* Faceless *(2007)

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Still from* Faceless *(2007)

etwa medizinischen und buchhalterischen Aufzeichnungen, zu ermöglichen und zu regulieren. Durch eine spätere EU-Richtlinie wurden der Datenschutz und der Aufgabenbereich des DPA (1998) auf Aufzeichnungen von Videoüberwachungsanlagen ausgedehnt. Abgesehen vom DPA müssen Betreiber von Videoüberwachungsanlagen weitere Gesetze befolgen, die sich auf Menschenrechte, das Recht auf Privatheit und kriminalpolizeiliche Ermittlungen, wie sie im *CCTV Code of Practice*[4] festgelegt sind, beziehen.

Als die ersten Anträge für Zugriff auf Videodaten insofern erfolgreich waren, als CCTV-Aufzeichnungen für *The Spy School* freigegeben wurden, stellte sich die Frage, wie stabil die gesetzlichen Rahmenbedingungen denn waren. Das *Manifest für CCTV-Filmemacher* wurde verfasst, demzufolge lediglich die Verwendung von Aufzeichnungen gestattet ist, die mithilfe des DPA erlangt wurden. Das Gesetz sollte mit den Mitteln der Kunst überprüft werden.



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[4] www.ico.gov.uk

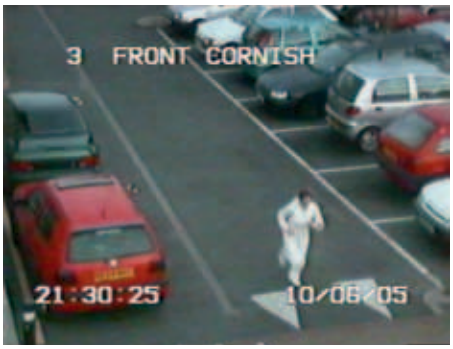
Ein gesetzliches Readymade

Undeutliche Schreckgespenster einer Bedrohung, die über zeitkodierte Überwachungskameras festgehalten wurden, rechtfertigen ein umfassendes Netz voyeuristischer Kameralinsen. Ein Netz teilnahmsloser Beobachtungsgeräte, die jede Straße, jedes Gebäude abtasten, um die Möglichkeit einer Vergangenheit, die freie Wahl, etwas zu vergessen, auszuschalten. Glanzpunkte, besondere Augenblicke kann es nicht mehr geben: Eine diskrete Tyrannei des „Jetzt" ist im Entstehen. „Realzeit" in ihrer pedantischsten Ausprägung.[5]

[5] Sinclair, Ian *Lights out for the territory* (London: Granta 1998), S. 91

Faceless ist ein CCTV-Science Fiction Märchen, das in London, der Stadt mit der weltweit größten Dichte an Überwachungskameras, spielt. Der Film wurde nach den Vorgaben des *Manifests* produziert: die Bilder stammen aus bestehenden CCTV-Anlagen und wurden von der Regisseurin/Protagonistin beschafft, indem sie ihre Rechte als „überwachte Person" gemäß des DPA wahrnahm.

Begreiflicherweise ist die Protagonistin in jedem Bild präsent. Durch die gesetzlichen Auflagen zum Schutz der Privatheit sind die CCTV-Betreiber dazu verpflichtet, dafür zu sorgen, dass keine der anderen Personen in den Aufzeichnungen identifizierbar ist. Im Allgemeinen erfüllen sie diese Anforderung, indem sie deren Gesichter unkenntlich machen. Dies erklärt die



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described as simply video or even captured light. More accurately, the medium comprises images that exist contingent on particular social and legal circumstances — essentially, images with a legal superstructure. *Faceless* interrogates the laws that govern the video surveillance of society and the codes of communication that articulate their operation, and in both its mode of coming into being and its plot, develops a specific critique.

Reclaiming the data body

Through putting the DPA into practice and observing the consequences over a long exposure, close-up, subtle developments of the law were made visible and its strengths and lacunae revealed.
I can confirm there are no such recordings of yourself from that date, our recording system was not working at that time. (11/2003)
Many data requests had negative outcomes because either the surveillance camera, or the recorder, or the entire CCTV system in question was not operational. Such a situation constitutes an illegal use of CCTV: the law demands that operators comply with the DPA by making sure that the equipment works properly[7].

In some instances, the non-functionality of the system was only revealed to its operators when a subject access request was made. In the case below, the CCTV system had been installed two years prior to the request:
Upon receipt of your letter [...] enclosing the required £10 fee, I have been sourcing a company who would edit these tapes to preserve the privacy of other individuals who had not consented to disclosure. [...] I was informed [...] that all tapes on site were blank. [...W]hen the engineer was called he confirmed that the machine had not been working since its installation. Unfortunately there is nothing further that can be done regarding the tapes, and I can only apologise for all the inconvenience you have been caused. (11/2003)

Technical failures on this scale were common. Gross human errors were also readily admitted to:
As I had advised you in my previous letter, a request was made to remove the tape and for it not to be destroyed. Unhappily this request was not carried out and the tape was wiped according with the standard tape retention policy employed by [deleted]. Please accept my apologies for this and assurance

[7] *CCTV Systems and the Data Protection Act 1998*, available from www.ico.gov.uk

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Still from* Faceless *(2007)

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Still from* Faceless *(2007)

„gesichtslose“ Welt des Films. Das Drehbuch von *Faceless* lässt auf die gesetzlichen Eigenschaften der Bilder zurückschliessen.

EchtZeit bestimmt das Leben aller Bewohner. Arbeiten, ruhen, essen, heiraten – jede Handlung passiert im Takt der EchtZeit. Und jede Handlung hinterlässt eine Spur – einen Fußabdruck am Strand des Datenmeeres.[6]

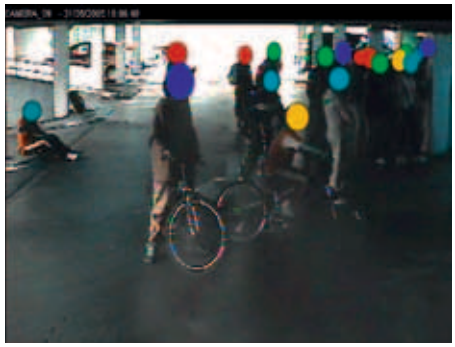
Der Film spielt in einer geradezu unheimlich vertrauten Stadt, in der ein neu eingeführter Echtzeitkalender Vergangenheit und Zukunft abschafft. Die Bürger sind endlich von Schuldgefühlen und Zukunftsangst befreit. Ohne Gedächtnis oder Erwartung verblassten die Gesichtszüge und die Bevölkerung wurde sprichwörtlich gesichtslos. Eine Zeit unvorstellbaren Glücks begann – bis eine Frau ihr Gesicht wiedererlangt …

Es gab kein Drehbuch im herkömmlichen Sinn: Der Plot entwickelte sich während des vierjährigen Prozesses der Bilderlangung. Einige Szenen wurden zwar geplant, doch die Aufzeichnungen aus der Videoüberwachung waren oft nicht erhältlich, weshalb die Geschichte ständig umgeschrieben werden musste.

Faceless definiert das CCTV-Bild als Beispiel für ein rechtliches Readymade (*objet trouvé*). Das Medium ist nicht einfach als Video oder fixiertes Licht adäquat zu beschreiben. Genauer gesagt, besteht das Medium aus Bildern, die kontingent unter bestimmten gesellschaftlichen und gesetzlichen Bedingungen existieren – im Wesentlichen aus Bildern mit einem rechtlichen Überbau. Der Film *Faceless* hinterfragt die Gesetze, die Datensammeln und -verwalten regeln, als auch die Kommunikationscodes, die mit der Umsetzung dieser Gesetze einhergehen, und ist sowohl durch seine eine Entstehungsweise als auch durch seinen Plot eine Form von Kritik.

Die Einforderung des Datenprofils

Da der DPA von der Filmemacherin über einen langen Zeitraum hinweg angewendet und seine Auswirkungen beobachtet wurden, konnten Veränderungen des Gesetzes, seine Stärken und Schwächen, im Detail aufgezeigt werden.
Ich kann bestätigen, dass es von Ihnen zum genannten Zeitpunkt keine Aufzeichnungen gibt. Unser Aufzeichnungsgerät war zu dieser Zeit außer Betrieb. (11/2003)
Die meisten Antworten fielen negativ aus, weil entweder die Überwachungskamera in Frage oder das Aufnahmegerät oder



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[6] *Faceless* (2007)



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that steps have been taken to ensure a similar mistake does not happen again. (10/2003)

Some responses were simply mysterious (data request made after spending an hour below several cameras installed in a train carriage):
We have carried out a careful review of all relevant tapes and we confirm that we have no images of you in our control. (06/2005)
Could such a denial simply be an excuse not to comply with the costly demands of the DPA?

Many older cameras deliver image quality so poor that faces are unrecognisable. In such cases the operator fails in the obligation to run CCTV for the declared purposes:
You will note that yourself and a indistinct in the tape, but the picture you sent to us shows you wearing a similar fur coat, and our main identification had been made through this and your description of the location. (07/2002)
To release data on the basis of such weak identification compounds the failure.

Much confusion is caused by the obligation to protect the privacy of third parties in the images. Several data controllers claimed that this relieved them of their duty to release images:
[…W]e are not able to supply you with the images you requested because to do so would involve disclosure of information and images relating to other persons who can be identified from the tape and we are not in a position to obtain their consent to disclosure of the images. Further, it is simply not possible for us to eradicate the other images. I would refer you to section 7 of the Data Protection Act 1998 and in particular Section 7 (4). (11/2003)
– even though the section referred to states that it is 'not to be construed as excusing a data controller from communicating so much of the information sought by the request as can be communicated without disclosing the identity of the other individual concerned, whether by the omission of names or other identifying particulars or otherwise'.

Where video is concerned, anonymisation of third parties is an expensive, labour-intensive procedure— one common technique is to occlude each head with a black oval. Data controllers may only charge the statutory maximum of £10 per request, though not all seemed to be aware of this:
It was our understanding that a charge for production of the tape should be borne by the person making the enquiry,

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1
Rotakin test target developed by UK police for evaluating the performance of CCTV systems

2
Police surveillance van for combatting street crime and nuisance, Manchester, 2007
Photo: Mukul Patel

die gesamte CCTV-Anlage nicht funktionstüchtig war. Das entspricht einer illegalen Verwendung der Anlage: Das Gesetz schreibt vor, dass die Geräte funktional sein müssen[7].

In einigen Fällen bemerkten die Betreiber erst als sie das Ansuchen erhielten, dass das System nicht funktionierte. Im folgenden Fall war die CCTV-Anlage zwei Jahre vor der Anfrage installiert worden:
Nach Erhalt Ihres Schreibens [...] und der erforderlichen Gebühr von £10 habe ich eine Firma zur Bearbeitung dieser Bänder gesucht, um die Privatheit anderer Personen, die der Freigabe nicht zustimmten, zu gewährleisten. [...] Man teilte mir mit, [...] dass alle Bänder leer wären. [...] A]ls der Techniker beigezogen wurde, bestätigte er, dass das Gerät seit seiner Installation nicht in Betrieb war. Wir bedauern, dass wir in dieser Angelegenheit nichts für Sie tun können und ersuchen Sie um Nachsicht für die Unannehmlichkeiten, die Sie hatten. (11/2003)

Technische Ausfälle dieser Größenordnung waren nichts Seltenes. Auch grobes menschliches Versagen wurde immer wieder eingestanden:
Wie ich Ihnen in meinem vorangegangenen Schreiben mitteilte, hatten wir beantragt, das Videoband beiseite zu legen, damit es nicht gelöscht wird. Bedauerlicherweise wurde diesem Ansuchen nicht Folge geleistet und das Band wurde gemäß der bei [Name unkenntlich gemacht] üblichen Aufbewahrungsfrist gelöscht. Ich ersuche um Nachsicht und versichere Ihnen, dass Schritte unternommen wurden, um in Zukunft derartige Fehler zu vermeiden. (10/2003)

Einige Antworten konnte man nur als mysteriös bezeichnen (folgendes Ansuchen wurde nach einem einstündigen Aufenthalt vor mehreren Kameras in einem Zug gestellt):
Wir haben alle relevanten Bänder sorgfältig geprüft und versichern Ihnen, dass wir über keine Bilder von Ihnen verfügen. (06/2005)
Ist eine solche Verleugnung von Tatsachen möglicherweise nur ein Vorwand, um die kostspieligen Auflagen des DPA nicht erfüllen zu müssen?

Viele ältere Kameras liefern derartig schlechte Bilder, dass kein einziges Gesicht erkennbar ist. Abgesehen von anderen Konsequenzen, gilt auch dies als illegaler Betrieb einer Videoüberwachungsanlage:
Sie werden bemerken, dass die Gesichter von Ihnen und Ihrem



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[7] CCTV Systems and the Data Protection Act 1998, www.ico.gov.uk



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of course we will now be checking into that for clarification. Meanwhile please accept the enclosed video tape with compliments of [deleted], with no charge to yourself. (07/2002)

Visually provocative and symbolically charged as the occluded heads are, they do not necessarily guarantee anonymity. The erasure of a face may be insufficient if the third party is known to the person requesting images. Only one data controller undeniably (and elegantly) met the demands of third party privacy, by masking everything but the data subject, who was framed in a keyhole. (This was an uncommented second offering; the first tape sent was unprocessed).

One CCTV operator discovered a useful loophole in the DPA:
I should point out that we reserve the right, in accordance with Section 8(2) of the Data Protection Act, not to provide you with copies of the information requested if to do so would take 'disproportionate effort'. (12/2004)
What counts as 'disproportionate effort'? The 'gold standard' was set by an institution whose approach was almost baroque — they delivered hard copies of several hundred relevant frames from the time-lapse camera, with third parties' heads cut out, apparently with nail scissors. Two documents had (accidentally?) slipped in between the printouts — one a letter from a junior employee tendering her resignation (was it connected with the beheading job?), and the other an ironic memo:
And the good news — I enclose the £10 fee to be passed to the branch sundry income account. (Head of Security, internal communication 09/2003)

From 2004, the process of obtaining images became much more difficult:
It is clear from your letter that you are aware of the provisions of the Data Protection Act and that being the case I am sure you are aware of the principles in the recent Court of Appeal decision in the case of Durant vs Financial Services Authority. *It is my view that the footage you have requested is not 'personal data' and therefore [deleted] will not be releasing to you the footage which you have requested.* (12/2004)

Under British common law, judgements set precedents. The decision in the case *Durant vs Financial Service Authority* (2003) redefined 'personal data'; since then, simply featuring in raw video data does not give a data subject the right to obtain copies of the recording. Only if something of a 'biographical nature' is revealed does the subject retain the right.

1
Still from* Faceless *(2007)

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Still from* Faceless *(2007)

Kollegen in dem Video ziemlich undeutlich sind. Auf dem Bild, das Sie uns schickten, tragen Sie jedoch einen ähnlichen Pelzmantel, sodass wir Sie hauptsächlich durch diesen Pelzmantel und Ihre Ortsangabe identifizieren konnten. (07/2002)
Daten, die auf Basis so vager Angaben ermittelt werden, dürften eigentlich nicht freigegeben werden.

Die Verpflichtung, die Privatsphäre abgebildeter Dritter zu schützen, stiftete große Verwirrung. Das führte mehrmals soweit, dass Betreiber sich der Pflicht, die Bildinformation zugänglich zu machen, enthoben glaubten:
[…W]ir können Ihnen die angeforderten Aufnahmen nicht aushändigen, da ansonsten Informationen über und Bilder von anderen Personen, die auf dem Video identifizierbar sind, preisgegeben würden. Es ist uns leider nicht möglich, deren Zustimmung zur Herausgabe der Bilder einzuholen. Außerdem ist es uns nicht möglich, diese Bilddetails zu löschen. Ich verweise auf den Abschnitt 7 des DPA 1998 und insbesondere auf Abschnitt 7 (4). (11/2003)
In dem genannten Abschnitt wird betont, dass Betreiber soviel der angesuchten Information wie möglich weiterzuvermitteln haben. Dabei muss vermieden werden, die Identität von Dritten, sei es namentlich oder durch andere indentifizierbare Besonderheiten preiszugeben.

Im Fall von Video ist die Anonymisierung Dritter ein kostspieliges, aufwändiges Verfahren. Eine weitverbreitete Methode besteht darin, jeden Kopf durch ein schwarzes Oval abzudecken. Die gesetzlich vorgeschriebene Pauschalgebühr pro Anfrage beträgt £10, obwohl das nicht alle zu wissen schienen:
Wir gingen davon aus, dass die Kosten für die Videonachbearbeitung von der ansuchenden Person übernommen werden, wobei wir diesen Punkt natürlich noch überprüfen werden. In der Zwischenzeit übermitteln wir Ihnen das Videoband mit den besten Grüßen von [Firmenname unkenntlich gemacht] – und zwar gebührenfrei. (07/2002)

Die anonymisierten Köpfe – visuell provokant und symbolisch aufgeladenen–, garantieren nicht unbedingt Schutz der Privatheit. Das Ausschwärzen eines Gesichts kann unzureichend sein, wenn die Drittperson demjenigen, der die Bilder anfordert, bekannt ist. Nur ein einziger Betreiber hat eine gültige Lösung gefunden, nämlich die “Schlüssellochmaske”, die alles ausser den erkennbaren Betroffenen abdeckte. (Es handelt sich dabei um ein vom Betreiber ohne Kommentar



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BBC NEWS CHANNEL

Page last updated at 13:52 GMT, Wednesday, 11 June 2008 14:52 UK

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Thief uses CCTV camera as mirror

A thief stole a chain from a teenager on a tram in south-east London and then tried it on - checking his reflection in the CCTV camera lens, police said.

Officers said the suspect snatched the chain and a bracelet from a 16-year-old boy in Bromley on 23 March.

The suspect threatened to stab the

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Having considered the matter carefully, we do not believe that the information we hold has the necessary relevance or proximity to you. Accordingly we do not believe that we are obligated to provide you with a copy pursuant to the Data Protection Act 1988. In particular, we would remark that the video is not biographical of you in any significant way. (11/2004)

Further, with the introduction of cameras that pan and zoom, being filmed as part of a crowd by a static camera is no longer grounds for a data request:
[T]he Information Commissioners office have indicated that this would not constitute your personal data as the system has been set up to monitor the area and not one individual. (09/2005)

As awareness of the importance of data rights grows, so the actual provision of those rights diminishes:
I draw your attention to CCTV systems and the Data Protection Act 1998 (DPA) Guidance Note on when the Act applies. Under the guidance notes our CCTV system is no longer covered by the DPA [because] we:
– only have a couple of cameras
– cannot move them remotely
– just record on video whatever the cameras pick up
– only give the recorded images to the police to investigate an incident on our premises (05/2004)

Data retention periods (which data controllers define themselves) also constitute a hazard to the CCTV filmmaker:
Thank you for your letter dated 9 November addressed to our Newcastle store, who have passed it to me for reply. Unfortunately, your letter was delayed in the post to me and only received this week. [...]There was nothing on the tapes that you requested that caused the store to retain the tape beyond the normal retention period and therefore CCTV footage from 28 October and 2 November is no longer available. (12/2004)

Amidst this sorry litany of malfunctioning equipment, erased tapes, lost letters and sheer evasiveness, one CCTV operator did produce reasonable justification for not being able to deliver images:
We are not in a position to advise whether or not we collected any images of you at [deleted]. The tapes for the requested period at [deleted] had been passed to the police before your request was received in order to assist their investigations into various activities at [deleted] during the carnival. (10/2003)

1
An ingenious use for a CCTV camera, probably unintended by the manufacturer.
BBC News, 11 June 2008

2
Advertisement for a GPS car navigation system with a database of 'safety' (traffic enforcement) cameras.
Photo: Mukul Patel

übermitteltes zweites Band, nachdem das erste völlig unbearbeitet ausgehändigt worden war.) Ein CCTV-Betreiber entdeckte eine opportune Gesetzeslücke im DPA:
Ich sollte darauf hinweisen, dass wir uns – gemäß Abschnitt 8(2) des Data Protection Act – das Recht vorbehalten, Ihnen keine Kopien der angeforderten Daten zu übermitteln, da dies einen „unverhältnismäßigen Aufwand" impliziert. (12/2004)

Was gilt als „unverhältnismäßiger Aufwand"? Alle Rekorde diesbezüglich schlug eine Institution, deren Vorgangsweise fast als barock bezeichnet werden kann: hunderte von Einzelbildern wurden auf Papier ausgedruckt, und die Köpfe der Drittpersonen waren allem Anschein nach mit Nagelscheren ausgeschnitten worden. Zwei Dokumente waren (zufällig?) zwischen die Ausdrucke gerutscht – ein Brief einer jungen Angestellten, die ihre Kündigung einreichte (besteht womöglich ein Zusammenhang mit dem Job, Köpfe auszuschneiden?), und eine ironische Notiz:
Und die erfreuliche Nachricht – ich lege die Gebühr von £10 bei, damit sie auf das Konto Verschiedenes überwiesen werden kann.
(Sicherheitschef, interne Kommunikation 09/2003).

Ab 2004 wurde das Verfahren erheblich erschwert.
Aus Ihrem Brief geht hervor, dass Sie die Bestimmungen des Data Protection Act kennen, daher bin ich sicher, dass Sie auch über die Richtlinien des jüngsten Entscheids des Berufungsgerichts im Fall Durant versus Financial Services Authority *informiert sind. Meiner Ansicht nach fällt das von Ihnen verlangte Filmmaterial nicht unter „persönliche Daten", weshalb wir [Name unkenntlich gemacht] Ihnen das angeforderte Filmmaterial nicht aushändigen werden.* (12/2004)

Im britischen Rechtssystem, das auf dem Gewohnheitsrecht basiert, haben Urteile Präzedenzcharakter. Die Entscheidung im Fall *Durant versus Financial Services Authority* (Finanzdienstleistungsbehörde; 2003) hat den Begriff „personenbezogene Daten" neu definiert; seither hat ein Betroffener nicht mehr das Recht, Kopien der Aufzeichnungen zu erhalten, nur weil er auf den Originalaufnahmen zu sehen ist. Dieses Recht hat er nur, wenn Informationen „biografischer Art" preisgegeben werden:
Nach sorgfältiger Erwägung der Angelegenheit glauben wir nicht, dass die Information, über die wir verfügen, die nötige Relevanz bezüglich Ihrer Person haben. Demgemäß glauben wir nicht, dass wir verpflichtet sind, Ihnen entsprechend des Data Protection Act 1998 eine Kopie auszuhändigen. Insbesondere möchten wir anmerken, dass das Video keine in irgendeiner Weise aussagekräftigen biografischen Details über Sie enthält. (11/2004)



2



The Guardian | Friday April 11 2008

National

Council uses criminal law to spy on school place applicants

Couple's anger over surveillance admission

Officials accused of playing James Bond

have contacted us or come and kno on the door rather than opting for sur lance, which is completely underha The woman, who lived in the Parks area of Poole, said her daughter was ing trouble sleeping because she feare man outside watching us".

1

In the shadow of the shadow

There is debate about the efficacy, value for money, quality of implementation, political legitimacy, and cultural impact of CCTV systems in the UK. While CCTV has been vital in solving some high profile cases (e.g. the 1999 London nail bomber, or the 1993 murder of James Bulger), at other times it has been strangely impotent (e.g. the 2005 police killing of Jean Charles de Menezes).

The prime promulgators of CCTV may have lost some faith: during the 1990s the UK Home Office spent 78% of it crime prevention budget on installing CCTV, but in 2005, an evaluation report by the same office concluded that the CCTV schemes that have been assessed had little overall effect on crime levels[8].

The public perception is rather different. Attitudes remain generally favourable, though concerns have been voiced recently about 'function creep' (prompted, for example, by the disclosure that the cameras policing London's Congestion Charge remain switched on outside charging hours).

Confidence in the technology remains high; though as the realities of its daily operation become more widely known, this may be somewhat tempered. Physical bodies leave data traces: shadows of presence, conversation, movement. Networked databases incorporate these traces into data bodies, whose behaviour and risk are priorities for analysis (by business, by government). The securing of a data body is supposedly necessary to secure the human body (either preventively or as a forensic tool). But if the former cannot be assured, what grounds are there for trust in the promise of the latter?

The panopticon is not complete, yet. Regardless, could its one-way gaze ever assure an enabling conception of security?

{8} Gill, M. and Spriggs, A.: 'Assessing the impact of CCTV', pp. 60–61 (London: Home Office Research, Development and Statistics Directorate, 2005)

The full text of the DPA (1998) is at www.opsi.gov.uk/ACTS/acts1998/19980029.htm

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1
Article in The Guardian, *11 April 2008*

2
Article in London Lite, *6 September 2008*

Die technische Möglichkeit per Schwenk und Zoomfunktion das Augenmerk auf eine Person zu richten, dient seitdem als Merkmal für personenbezogene Daten. Wurde man hingegen mit einer statischen Kamera etwa inmitten einer Menschenmenge gefilmt, qualifizeren sich die Aufnahmen nicht als Daten biografischer Natur:
[D]as Information Commissioner's Office bezeugte, dass es sich in diesem Fall nicht um personenbezogene Daten handelt, da das System eingerichtet wurde, um ein Gebiet und nicht eine Einzelperson zu überwachen. (09/2005)

Während das Bewusstsein der Öffentlichkeit gegenüber Datenrechte ansteigt, wird die Umsetzung derselben immer schwieriger:
Ich verweise auf den Text „CCTV Systems and the Data Protection Act 1998 Guidance Note on when the Act applies". Diesem Dokument zufolge fällt unsere Videoüberwachungsanlage nicht länger unter den DPA, [weil] wir: nur einige Kameras haben; diese nicht fernbedienen können; nur auf Video aufnehmen, was zufällig in das Blickfeld der Kamera kommt; die Aufnahmen lediglich der Polizei zur Untersuchung von Vorfällen auf unserem Gelände aushändigen. (05/2004)

Auch die Zeitspanne der Datenvorratsspeicherung (die von den verantwortlichen Stellen selbst definiert wird) ist für den CCTV-Filmemacher oft ein Unsicherheitsfaktor:
Besten Dank für Ihr an unser Geschäft in Newcastle adressiertes Schreiben vom 9. November, das an mich weitergeleitet wurde. Bedauerlicherweise erhielt ich den Brief durch eine Verzögerung auf dem Postweg erst diese Woche. [...] Es befanden sich keine der von Ihnen angeforderten Bilder auf den Videobändern, die Anlass gegeben hätten, die Videobänder über den üblichen Speicherungszeitraum hinaus aufzubewahren, weshalb das Filmmaterial der Videoüberwachungsaufnahmen vom 28. Oktober und 2. November nicht mehr verfügbar ist. (12/2004)

Inmitten dieser Litanei an Ausreden, die disfunktionale Geräte, gelöschte Bänder, verlorene Briefe oder legale Schlüpflöcher inkludieren, befand sich eine einzige verständliche Rechtfertigung, warum keine Bilder geliefert konnte:
Wir können Ihnen nicht mitteilen, ob wir im [unkennlich gemacht] Bilder von Ihnen aufnahmen. Die Bänder für den gewünschten Zeitraum wurden bereits vor Erhalt Ihrer Anfrage der Polizei übergeben, um deren Untersuchungen verschiedener Aktivitäten am [unkennlich gemacht] während des Karnevals zu unterstützen. (10/2003)


Councils recruit kids as 'spies'

● LONDON children as young as eight have been hired by councils to snoop on neighbours and report petty offences such as littering. Boroughs across the UK, including Ealing, Bromley, Enfield, Southwark and Waltham Forest, have hired 5,000 "covert intelligence sources".

2



Im Schatten des Schattens

Man diskutiert über Effizienz, Qualität der Ausführung, politische Legitimität und kulturelle Auswirkungen der CCTV-Anlagen in Großbritannien. Während Videoüberwachung bei der Lösung einiger Fälle, die grosse Beachtung in den Medien fanden, eine wesentliche Rolle spielte (z. B. 1999 beim Fall des Londoner Nagelbombers oder 1993 im Mordfall von James Bulger), erwiesen sie sich in anderen Fällen als seltsam nutzlos (z.B. 2005 als Jean Charles de Menezes von der Polizei ermordet wurde). Die eifrigsten Verfechter der Videoüberwachung scheinen bereits ihren Glauben an dieses Allheilzweckmittel verloren zu haben. In den 1990er Jahren investierte das britische Innenministerium 78 % des Präventivbudgets gegen Kriminalität in CCTV. In einem Evaluationsbericht aus dem Jahr 2005 kam dieselbe Stelle zu dem Schluss, dass die bewerteten CCTV-Modelle wenig Auswirkung auf die Kriminalitätsrate hatten[8].

Die öffentliche Wahrnehmung sieht anders aus. Überwiegend ist die Öffentlichkeit positiv eingestellt, obwohl in jüngerer Zeit Bedenken über Zweckentfremdung laut wurden (ausgelöst beispielsweise durch die Enthüllung, dass die Kameras, die in London die Bezahlung der Innenstadtmaut überwachen, auch außerhalb der gebührenpflichtigen Zeit eingeschaltet bleiben). Das Vertrauen in die Technologie ist zwar nach wie vor hoch, könnte aber schwinden, sollten die tatsächlichen Umstände des täglichen Betriebs bekannter werden.

Physische Körper hinterlassen Datenspuren: Schatten der Anwesenheit, Gespräche, Bewegung. Vernetzte Datenbanken verdichten diese Spuren zu einem „Datenkörper", dessen Verhalten und Risiko im Zentrum von Analysen (der Wirtschaft und der Regierung) stehen. Die Sicherstellung eines „Datenkörpers" ist angeblich notwendig, um den menschlichen Körper zu schützen (präventiv, oder als forensisches Hilfsmittel). Wenn Ersteres nicht gewährleistet werden kann, warum sollte man daran glauben, dass Letzteres funktioniert?

Das panoptische System ist (noch) nicht komplett. Es stellt sich aber die dringende Frage: Kann der Einwegblick jemals als Grundlage eines Sicherheitskonzeptes dienen, das vorgibt, die Betroffenen zu bevollmächtigen, sie zur Mitverantwortung und Teilnahme aufzufordern?



Ministry loses 45,000 secret files

By Christopher Hope

THE personal details of 45,000 people, including dates of birth, criminal records, National Insurance numbers and court information, were lost by a single Government department last year.

The Ministry of Justice's (MoJ) annual accounts show that the data was lost in nine separate incidents in the past financial year.

The worst loss, in June last year, saw civil servants lose the names, addresses and some bank details of 27,000 people working for suppliers to the MoJ.

Officials at the Ministry of Justice also violated an "inadequately protected" laptop containing the job applications of 13 people who were applying for judicial posts.

The losses are the latest in a list of data blunders by Government departments, which included the loss of two CDs containing the entire child benefit database of 25 million families. The CDs are still missing.

The police were informed about six of the nine latest losses while 39,000 of the 45,000 people affected were not told that the MoJ had lost their details.

The information was being held on "inadequately protected electronic storage devices", thought to be memory sticks.

There was another major error in January this year when officials lost an "inadequately protected" laptop in a secured Government office.

The computer contained the names, dates of birth, addresses and offence details of 16,000 "low defenders", including the National Insurance numbers in one fifth of the cases.

The Liberal Democrats' justice spokesman, David Howarth MP said: "Yet again the Government has shown that it cannot be trusted with citizens' personal data.

"How can ministers possibly argue for the introduction of a universal ID Card scheme when they can't even keep safe the data they already have."

An MoJ spokesman said: "Risk assessments were carried out to assess who, if anyone, should be notified and to ensure measures were in place to mitigate risk to individuals and to prevent a recurrence of the incident."

The Government is battling to restore people's trust over the way it handles private information of taxpayers."

Last month, the Ministry of Defence said it had lost 658 laptops over the past four years – more than twice an earlier estimate.

In April the Information Commissioner said he was notified of 94 data breaches since the loss last year of the child benefit database – two thirds were committed by the Government and other public sector bodies.

[8] Gill, M. und Spriggs, A. „Assessing the impact of CCTV" (London: Home Office Research, Development and Statistics Directorate 2005), S. 60–61

***Above:** Article in* The Telegraph*, 16 August 2008*

***Left:** FRAMED: THE MINISTRY, FRAMED: THE TRANSPORT, FRAMED: THE MONEY*
Unique edition of inkjet prints, each 300 x 91 cm (Manu Luksch 2003)
Image courtesy Gallery Barry Keldoulis, Sydney

As I had advised you in my previous letter, a request was made to remove the tape and for it not to be destroyed. Unfortunately this request was not carried out and the tape was wiped in according with the standard tape retention policy.
Please accept my apologies for this and assurance that steps have been taken to ensure a similar mistake does not happen again.
Yours sincerely
Upon receipt of your letter of the 27th September, enclosing the required £10.00 fee, I have been sourcing a company who would edit the tapes to preserve the privacy of other individuals who had not consented to disclosure. Having found a company to do this, I asked the site to forward the tapes to me and was informed that they had discovered that all tapes on site are blank. He advised me there was a technical fault with the CCTV machine and that when the engineer was called he confirmed that the machine had not been working since its installation.
Again please accept my sincerely apologies for not being able to assist you on this occasion. Should you wish to discuss this matter further with me, please do not hesitate to contact me.
Yours sincerely



Above: The Mistake
Chalk writings in public space
(Manu Luksch, 2008)
Adaptation of the Manifesto
by Joseph Beuys (1985)

Left: I wish to apply, under the Data Protection Act, for any and all CCTV images of my person held within your system. I was present at [place] from approximately [time] onwards on [date].
Set of three inkjet prints in light boxes, 150 x 37 cm
(Manu Luksch, 2006)

Charing Cross
Strand
Villiers St
Watergate Walk
Craven Passage
Craven St
Embankment
Northumberland Ave
Whitehall
Craig's Court
Great Scotland Yard
Whitehall Pl
Victoria Embankment
Horse Guards Ave
Downing St
Richmond Terrace
Parliament St
King Charles St
Derby Gate
Cannon Row
Westminster
Great George St
Bridge St

MAPPING CCTV IN WHITEHALL

Two-part exercise to map CCTV cameras around Whitehall, London, within a zone covered by SOCPA (Serious and Organized Crime Prevention Act). A map of the hundreds of cameras in the zone was made over two days of observation. The second part involved mapping the range of one of these cameras, no. 40 in Villiers Street, by intercepting its signal as it was transmitted wirelessly without encryption. As passers-by entered the marked area covered by camera no. 40, they were alerted to the camera's presence and handed a copy of the map of CCTV cameras in Whitehall.

Manu Luksch
2008

Video: DV, 3 mins

Left: Map of CCTV cameras in Whitehall

1
Using the intercepted signal of camera no. 40 to map its range (video still)

2
Marking the range of the camera with tape on the pavement (video still)



1



2

Mukul Patel

2007

FACELESS: NOTES ON SOUND

Sound for the film *Faceless* posed a particular challenge: while the image is clearly and precisely determined by concept and process, the surveillance cameras record no sound. With neither field ambience nor dialogue as a starting point, and no constraints equivalent to those determining the image, the sonic world of the film had to be created ex nihilo.

The soundtrack is composed in 5.1 (five full-frequency channels: left, centre, right, rear left, and rear right, plus subwoofer). I don't use the rear speakers just for special/spatial effects – as point sources, they are as important as the front speakers. For example, there is the 'pulse of RealTime', which ticks clockwise around the viewer throughout the film.

The surround soundtrack helps to overcome the spatial and temporal limitations of the CCTV footage:

– The immersive quality of the soundtrack compensates for the large depth of field and limited range of perspectives of the CCTV cameras, psychologically enlarging or compressing the space. There are no visual close-ups in this film – only sonic ones.

– The ability to move sound right around the audience carries movement in the picture over the chasms of time-lapse recording. (The full-frame-rate errors and jitter in the images also helps).

The 'dream space' in the film – passages are accompanied by Rupert Huber's solo piano – is further distinguished by being the only part in mono or stereo, without the rear speakers. Sonic textures are predominantly 'postindustrial ambient' – not industrial, not even 'light industrial', but more the throb of the service sector.

In late 2006, it became clear that the film needed a voiceover. An early project with the footage (*The Spectral Children*) used intertitles, but the plot grew too complex to be narrated elegantly in this way. It was not only the appropriateness of her voice, but also her longstanding commitment to critical art that made Tilda Swinton the ideal narrator for *Faceless*. Her

voice is placed, classically, in the centre speaker. (We recorded the narration in a couple of hours in a restaurant overlooking the Moray Firth, by her house in Scotland).

The other voices in the film – those of the choir led by Eva Königer, which sings the refrain of the New Machine – are treated in a way that they are difficult to locate, the lyric barely distinguishable, to add a spookiness to the world.

Until a few days before the mastering date, I had no sound for the dance of the Spectral Children. Then, I chanced across an old recording of Paul Zimmerman playing berimbau. Cut up to the image, this was the perfect sound for a dance of rebellion. (Today the berimbau is used in the favelas as a signal warning of police).

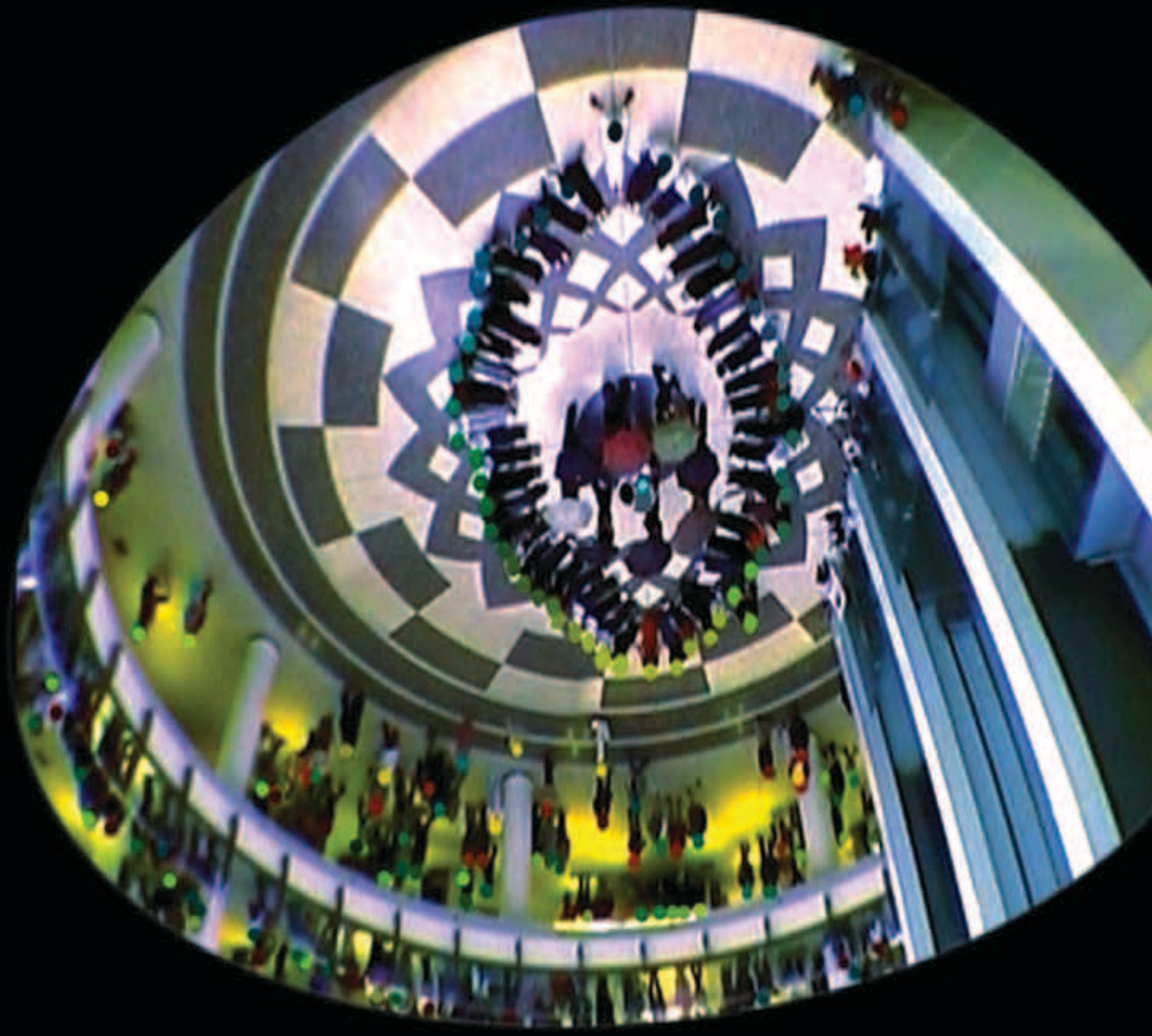
On a final note, there is only one moment of truly diegetic sound in the film – it's hard to miss.

SIDELONG GLANCES

4. The age of spiritual machines

Having elegantly spattered the surrounding surfaces, Rebecca Horn's painting machine – in the *Bodylandscapes* retrospective at the Hayward Gallery, 2005 – lay provocatively quiescent. Had it determined that the work was complete, or had it balked at the prospect of a lawsuit from a Prucci-clad visitor? Either way, Ray Kurzweill ought to be told.

Mukul Patel
2007



THE EYE

The Eye is a site-specific dance piece for 80 performers of all ages, developed as a humourous hommage to Busby Berkeley's Hollywood revue movies. The choreography is filmed from above by surveillance system operators whose vantage point is shared by the audience, and unfolds in kaleidoscopic patterns. The project took place in the atrium of Lakeside Shopping Centre, Essex. A subsequent piece, *The Eye 2*, was conducted with youth dance initiative Alluminae Project for public spaces in the Brentford Housing Estate, West London.

Manu Luksch
2005

Choreography for surveilled space, developed in collaboration with Billy Trevitt & Michael Nunn (The Ballet Boyz ⁄ George Piper Dances)



Far left: Still from **The Eye**

Left: Still from **The Eye 2**



ORCHESTRA OF ANXIETY

Manu Luksch & Mukul Patel
2005

Participatory installation. *Orchestra of Anxiety* was commissioned by Watermans Arts Centre in London.

The *Orchestra of Anxiety* is a collection of instruments that deploy security and surveillance technologies in unusual and playful contexts, prompting visitors to reflect on their personal sense of security and their relationship with public fears (of petty crime, terrorism, etc.). The first instrument to be built is a steel harp with strings of razor wire, which requires the harpist to wear protective gauntlets to play it.

Gallery visitors are invited to play the harp after donning protective chain mail gauntlets. The razor wire 'strings' trigger multiple projections and sound sources. A pedal enables the harpist to loop phrases for accompaniment. The installation has a game-like grammar that can be learned over a few minutes. Initially, a filmed guard dog patrols the walls of the installation space[1]. Touching strings at random triggers a ferocious attack. More musical playing calms the dog and makes him sing. Once the harpist has calmed the guard dog, the installation switches to a second theme: CCTV[2]. The object is to search the initially vacant housing estate grounds for children, and then to make them dance.

In mythology, the harp is regarded as a sacred or metaphysical instrument and is associated with tranquility, love, and goodness around the world. A Biblical story tells of how David exorcised Saul's bad spirit by playing a harp. The razor wire harp has similar powers to drive out evil and madness, but the harpist must first overcome the anxiety that the instrument provokes.

[1] A professional guard dog was directed to attack the camera during the film shoot.

[2] Images were obtained from existing surveillance cameras in a London housing estate. A guerrilla choreography for the public spaces of the estate was developed in collaboration with a youth dance initiative.

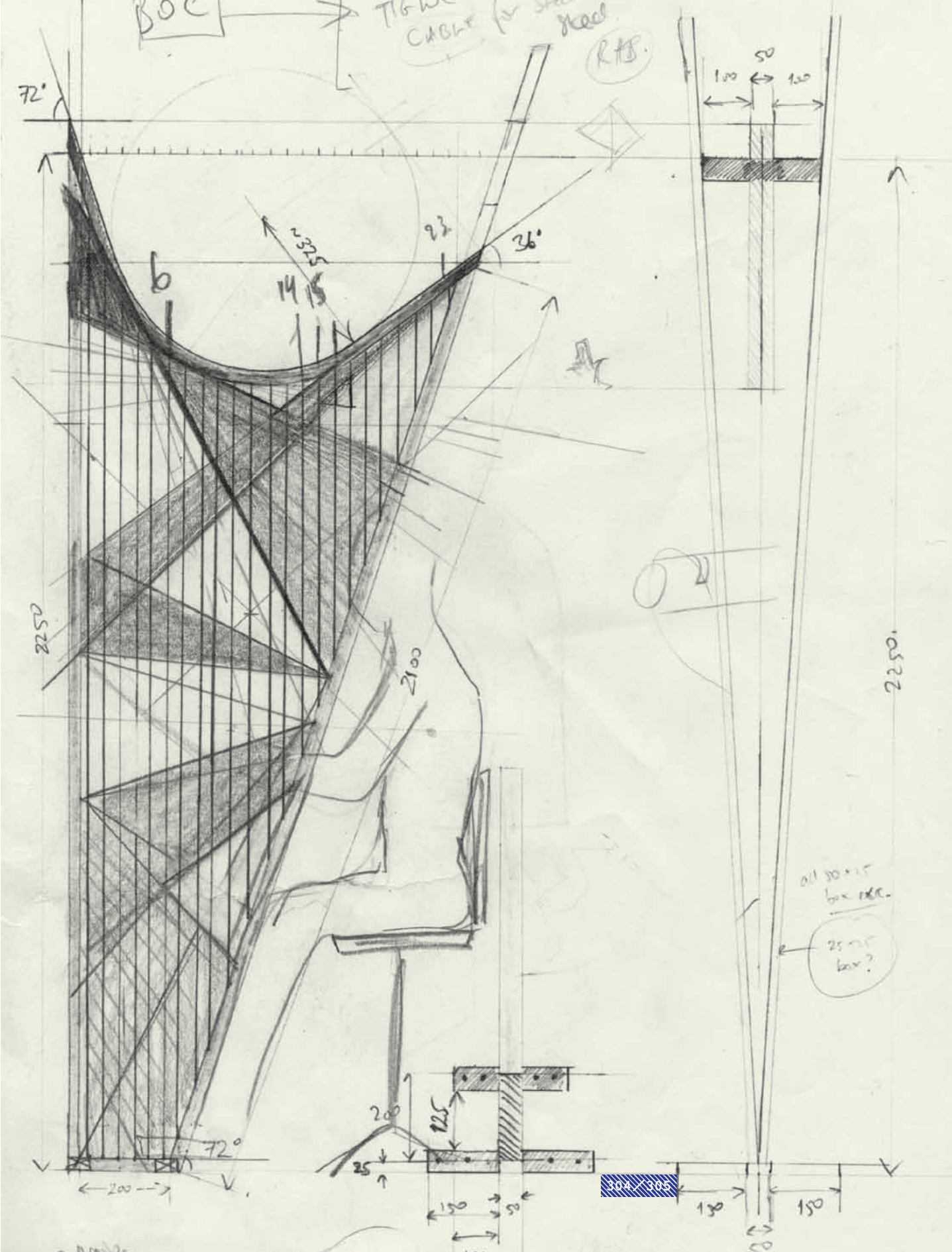
Crowd control

During the installation of the harp at Watermans, the gallery raised concerns over health & safety issues, citing the possibility of children or drunken visitors falling into the razor wire. The exhibition was allowed to open only on the condition that crowd control barriers were erected around it, and that visitors who wanted to play the instrument do so under the supervision of the artists.

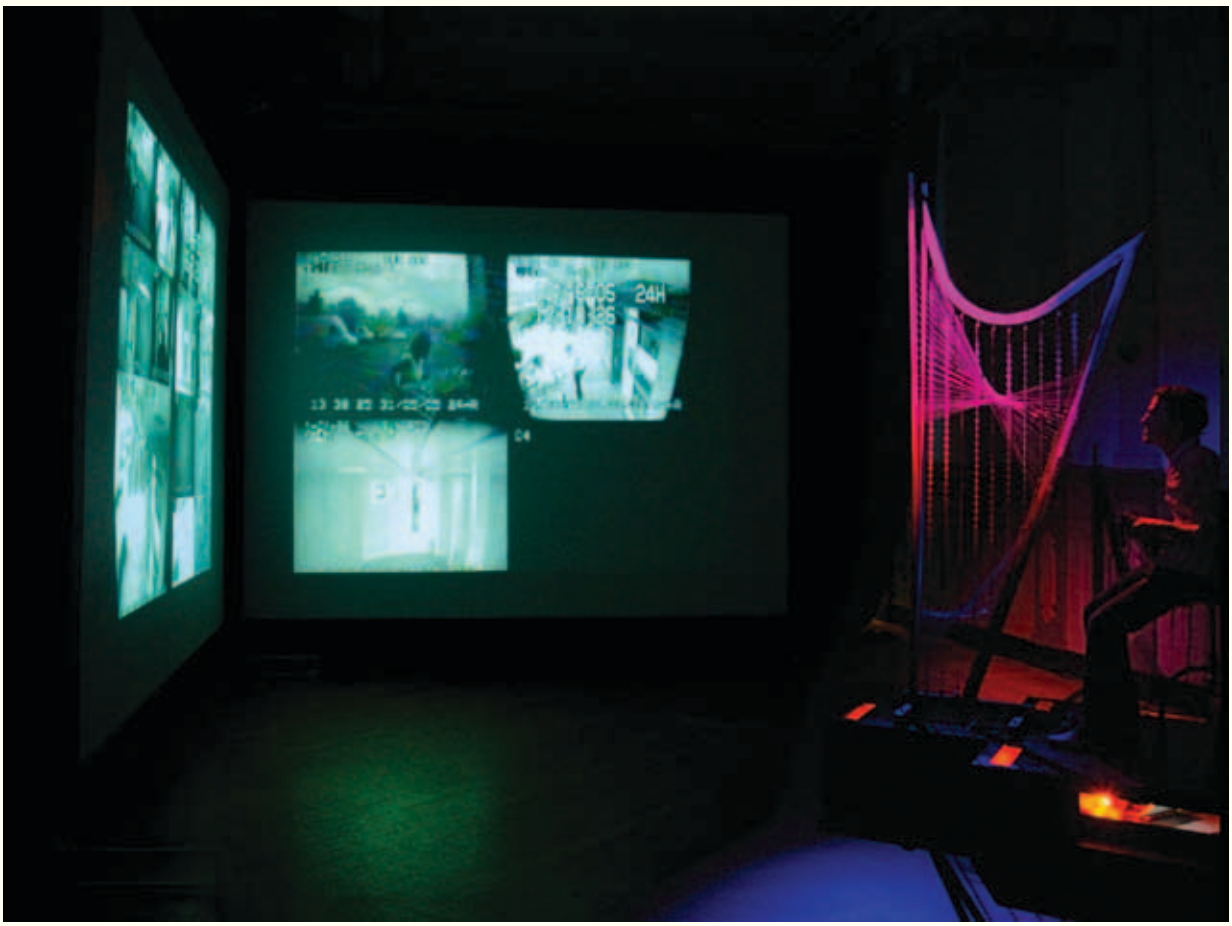


Above: Stills from the video shoot with guard dog and handler Tony Heldt, of OmniSecurity. Tony directed the dog to approach, threaten, and attack the camera.

Right: Sketch for harp, with frame angles based on the shape of razor wire blades. Harp constructed in collaboration with engineer and sculptor John Ashworth.


72°
b
14
15
23
36°
2250
2100
200
72°
125
35
150
50
50
150
150
2250





Left: Orchestra of Anxiety *at* SOHO in Ottakring *Festival, Vienna 2006*

Above: Orchestra of Anxiety *at* databodies, *Paradiso, Amsterdam 2006*





The Order
100 portraits: video installation and photographic prints (Manu Luksch, 2009)

8／OPEN PROCESSES OPEN DOORS

“If you have enough rice, even if there are heavy rains and thunderstorms, you can eat without going out to work. Those who have only money can only get hold of things for daily life by buying them.”

Abaw Buseu, from the film Virtual Borders *(Manu Luksch, 1999)*

MAKE IT SNOW! MAKE IT SNOW! MAKE IT SNOW!

Manu Luksch
2008

One-minute video commissioned by Animate Projects and RSA Arts & Ecology as part of *Stop.Watch* in association with Arts Council England and Channel 4

Europe's mountainous regions currently feel the effects of climate change more dramatically than the lowlands. Temperatures are rising proportionally higher, glaciers are receding, biodiversity is threatened, snowfall is lower, and avalanches and mud slides are more frequent.

In order to maintain winter tourism – the primary business in most of Europe's mountainous areas including the Alps and the Pyrenees – the first few snow cannons were introduced about 25 years ago. Today 80% of Italian Alpine resorts, and 65% of the Austrian and French ski slopes make use of artificial snow to provide the white landscape advertised in travel magazines. Artificially-produced snow costs €2/m^2 every season (much of which comes from EU funds), and importantly, consumes huge amounts of energy and water. The snow cannon epitomizes how humans cover up and even exacerbate ecological problems in order to fulfill frivolous desires.



Make it snow! make it snow! make it snow! is a (very) short meditation on the manipulation of winter landscapes for tourism that points to their fragility and recalls the need for a holistic perspective.

Siraj Izhar
2008

PARALLEL PROCESSES AND CULTURAL ECOSYSTEMS

Processes are the vehicles of change; equally processes are instruments for preventing change. Whilst the image and talk today may be that of a fast changing world, at the structural level, reality is much as it has been: that is, the members of the G8 nations and the Security Council are still the same, the demographics of financial power and the balance of trade between rich and poor nations barely shifts, greenhouse gas emissions continue to rise along with the rate of global deforestation, and so forth. At the structural level, change remains the hardest currency and it could be argued that the only forms of change possible are those that augment the present structures.

The reality of grid-locked structures at a time of heralded change mediated by communications technology was encapsulated in the 1990s by the acronym TINA: 'There Is No Alternative' (to change). In truth, 'There Is No Alternative' stood for the paradox of the epoch: the change that is the obverse of change. What is further intriguing is that TINA as a concept began life in a previous generation at the Shell Centre at London's South Bank, the headquarters of Royal Dutch Shell. Here in the 1970s, the French executive Pierre Wack instituted a practice of 'scenarios thinking' as a means of generating scenarios of change in the global marketplace. The art of scenarios thinking drew heavily on Wack's interest in the mystic traditions of India and Japan, above all in the writings of Gurdjieff. To 'contexts of accelerated change, greater complexity and genuine uncertainty'[1], Wack employed a methodology drawn from the historian Fernand Braudel's concept of 'conjunctural history' that mapped combinations of movements in history, with short-term rhythms and long durations spanning centuries. Within the long durations, Braudel had identified the forces he saw as being unstoppable or undeniable, what he called the 'tendances lourdes'[2].

Pierre Wack's practice of scenarios thinking (nicknamed 'the yoga of perception' in corporate culture) conceived a future built around the 'tendances lourdes' to shape the corporate strategies of Royal Dutch Shell at the projected end of one of Braudel's long durations. Historically this coincided, through chance or by calculation, with the explosion in the price of

[1] Pierre Wack *Scenarios: Uncharted Waters Ahead* (Cambridge: Harvard Business Review, 1985). Publications by Pierre Wack are largely out of print though there are numerous references online. Shell's website www.shell.com devotes several pages to scenarios thinking.

[2] Fernand Braudel *The Perspective of the World: Civilization and Capitalism 15th–18th Century Vol. 3* (New York: Harper and Row, 1982)

crude oil in 1972, a decade of ensuing recession and the dawn of the informational age. Through chance or through calculation, Wack's methodology reaped dividends for Shell. With the years the 'tendances lourdes' translated itself into the marketplace as the three inseparables 'Globalisation, Liberalisation, Technology', and went on to become an ideological instrument for restructuring society in its wake: TINA.

The logic of TINA applied to the arts has in its turn produced the space of the globalised art market. Through the 90s, contemporary art 're-valorised' itself in alignment with the market through a conflation of private and public institutions, along with a retrenchment into orthodoxies of authorship and commodity. Art as a market became instrumental to the Culture Industry, incorporating or recuperating a wide spectrum of social processes. In this conflation, subculture, activism and art provide content through the same globalised process of a supply-and-demand chain in a buoyant 'representation' market, which ironically de-valorises the very thing that engendered the supply-line for marketable content: the social autonomy of civil processes. The term 'valorisation' extrapolates Marx's theory of the process of value production to describe the causal relationship between the new social dynamics and methods of creating market value in the information age. De-, re-, and over-valorisation, as used by globalisation theorist Saskia Sassen, show how the new realities of globalisation are umbilically tied to immense concentrations of wealth in a few key global centres[3]. The dependency on epi-centres applies as much to a representation market as to a labour market. With the accelerating movement of people, new patterns of social segmentation form in deregulated economies of informal zones and flexible labour.

This creates a new politics of diversity summarised by a fresh dialectic between a valorised representational market, a de-valorised informal labour market, and an over-valorised art market driven by 'super-profits' – a phrase used by Sassen to describe the speculative yet spectacular nature of globalised business driven by its financial sector. The art market symbolises this with its rising phenomenon of super-curators and blockbuster museums ringed by a supporting circuit of increasingly uniform global platforms, biennales and art fairs. In this value production spiral, alternative art practices have been faced with their own TINA, either short-circuited or recuperated by the growing market demand for representational content. The global Culture Industry now

[3] Saskia Sassen *Globalization and Its Discontents: Essays on the New Mobility of People and Money* (New York: The New Press, 1998)

harvests 'oppositional' culture with far greater efficiency for the representation market, with curated orders of 'marketable Others' in the new politics of diversity and informal processes. At the same time a parallel shadow industry burgeons in 'proliferating illegitimacies', in the social processes of everyday life that lie outside the managerial consciousness of the valorisation circuits. The illegitimacy of a parallel industry grows at the level of lived process, whereby, as Michel De Certeau would describe it, 'there is a rejection of everything that is not capable of being dealt with [...] and so constitutes the waste products of functionalist administration'[4].

Amidst this culturally mediated creation of 'value' and 'waste', the dimension of ecology applies more critically than ever to cultural theatres, and not just the natural environment. The publication of Felix Guattari's *The Three Ecologies* in 2000 provided an integrating template for the three interacting and interdependent ecologies of mind, society, and environment[5]. By defining the aesthetic paradigm as an ecological imperative, Guattari intimated a methodology for an art process amidst an industrial circuit-production of contemporariness. What he termed 'ecosophy' was presented not as an imaginary, but a necessary imperative, in other words an alternative 'There Is No Alternative', now evolving through an entirely different prism of reality.

[4] Michel De Certeau *The Practice of Everyday Life* (Berkeley: University of California Press, 1984). The quotations here are liberally interpreted from the chapter on 'Walking in the City'.

[5] Felix Guattari *The Three Ecologies* (London: Continuum, 2000)

Praxis as Process

To apply an eco-logic to a cultural or representational process, entails the deployment of strategies working across fields of different disciplines and contexts, perhaps describable in terms of a transversal space. Since its use in *A Thousand Plateaus*, the transversal has always conjured up futuristic images of virtual spaces, Temporary Autonomous Zones, instantaneous global networks; but applied to the here and now, the transversal is a messy complicitous process embedded in the real-politics of situated practice. This messiness is true to its roots, the transversal deriving from the exchanges in the mental space of a psychoanalytic process involving unavoidable contagion or transference.[6]

Applied to the theatre of public space, the transversal suggests the construction of processes that operate across conflicting terrain with uncertain outcomes: process as emergent process, process as an end in itself. Such processes

[6] Gilles Deleuze and Felix Guattari *A Thousand Plateaus* (London: Continuum, 1988). In the context of this essay it should be noted that the title *A Thousand Plateaus* itself drew from Gregory Bateson's 'plateau of intensity' as a means of resolving a double bind impasse. Deleuze and Guattari described it as 'a continuous, self-vibrating region [...] whose development avoids any orientation toward a culmination point or external end'.

constitutes 'praxis as process'. The aesthetics of praxis as process, that is the poiesis of praxis[7], lies in a methodology that involves simultaneous, parallel threads of engagement: threads of cultural process, economic process, legal process, environmental process. These threads connect through a praxis as process. The logistics of such praxis necessarily involves three operational factors: sustainability, continuity, autonomy. The three are interlinked, have no particular order, and may give rise to contradictions. But their acting together implies the self-creation of resources of some form to enable a process to reproduce itself; if this is not addressed the process would either reach a dead-end or surrender its autonomy. Within a praxis, the means of production and the means of representation are interwoven in a single process – that is, a praxis represents itself through its own autonomous sustainability and the way it navigates itself. This distinguishes a praxis of process from the modes of artistic practice whereby a prerequisite is a form of representation in another space. In such instance, production and representation constitute separate circuits that correlate to what the curator Nicholas Bourriaud has described in *Postproduction* whereby the art-work serves as a temporary terminal for a network of interconnected elements[8]. However, the telos of such work, its projected mode of production and consumption in reality fuels a contemporary game, a methodology of recuperation and counter-recuperation, recuperation and counter-recuperation… played out between artist and institution. Each step of a mutually valorising exchange progressively filters the work, as Art, as the 'absolute merchandise' – Marx's phrase for commodity value pushed to its logical extreme. This value-creation process has only the one market and reinforces the curating institution as the validating terminus.

An autonomous emergent process is something else. It is usually self-initiated, and whilst there is some affiliation to genres of public art or community art, it has to define its own theatres of operation. Constructing an emergent process as an end in itself requires its sustaining over several years so that it evolves through phases of production, (means of) reproduction and (strategies and tactics) of representation. These feed and grow out of each other; an emergent process need not leave a product. To illustrate such process in terms of a personal practice, three scenarios follow as examples:

1. In 1999, as a member of the ICC (The Intercontinental Caravan), I organised a march of the 40 Indian peasant farmers

[7] Humberto Maturana and Francisco Varela *Autopoiesis and Cognition. the realization of the living* (Boston: D. Reidel, 1973/1980) condensed the conflict between praxis (as action) and poiesis (as creation and production) through their hydrid term autopoiesis which Varela described as the 'autonomy proper to living systems'. Quoted from Felix Guattari by Gary Genosko in *The Three Ecologies*.

[8] Nicholas Bourriaud *Postproduction* (New York: Lukas & Sternberg, 2002)

we brought to the UK as part of the caravan. The caravan was a mobile protest against the WTO, Monsanto, and the corporatisation of agriculture through increasing dependency on the global seed market. The farmers' march from Brick Lane, in Spitalfields, East London to the Bank of England, in the Corporation of London, the heart of global financial power, was a small part of a pan-European project. The march itself did not provide the interpretive frames for its perception, other than the reality or spectacle of 40 peasant farmers, shouting 'WTO murtabad' ('Death to the WTO') surrounded by twice as many policemen on horseback or motorbikes. The farmers carried real estate placards – culled from the neighbourhood, advertising property around Spitalfields, now requisitioned for new use vilifying the WTO. There was no strategy to pre-represent the march for any market, either for artists or activists. The march itself was part of a continuity for farmers who had not been to the West before; its transversal properties as a medium lay in the self-framing potential of an alien environment by subjects at different ends of the geopolitical landscape[9].

2. Fashion Street was a 600 m^2 space set up in the mid 1990s. The space was divided into private, semi-private and public zones shared by artists (working mainly with digital media) and environmental and political activists. The thinking behind Fashion Street coincided with a long association with the physicist David Peat and his understanding of David Bohm's rheomode[10]. Bohm's rheomode is an examination of the noun-based structure of our language and cultural consciousness which in turn structures the way we perceive and act; a noun-based language structure contrasts with the verb-based structure of indigenous cultures like the Inuit, which defines their ways of interaction. Fashion Street was a highly active space, and whilst the work of both the activists and artists was of high profile, neither eclipsing the other, the crossovers and intersections between artists and activists remained discernibly separate[11]. Like the farmers' march where the activity had to be pre-framed for possible reification as art or activism, with the spectrum of activities at Fashion Street, the verbs stayed firmly in-between the nouns so to speak.

3. In 2000 the derelict public lavatory by Nicholas Hawksmoor's Christchurch Spitalfields was converted into a public space called Public Life. Public Life had a bar that provided the money flow to underwrite the building works. Through the 1990s, the derelict lavatory had been the base for a chain of sequential art projects lasting several years. This sequence

[9] One account of the activities of the farmer's caravan whilst in the UK is provided by Katherine Ainger, 'Life is Not Business: the intercontinental caravan' in *We Are Everywhere: The Irresistible Rise of Global Anti-Capitalism* (London: Verso, 2003)

[10] David Bohm *Wholeness and the Implicate Order* (London: Routledge and Kegan Paul, 1980)



Flyer for post-Expo Destructo event at Strike, Fashion Street

[11] The Fashion Street experiment ended in 2000, in sync with the regeneration of Spitalfields which saw the disappearance of a complex network of artist-led spaces and a thriving micro-entrepreneurial

was built around the artist as an author-subject operating in a situationist urban space. By the late 1990s, Spitalfields was subject to intense property speculation in line with what David Harvey identified as cycles of capitalist engagement with the built environment[12]. In the wake of 9/11 and the opening gambit of the 'War on Terror', an underlying struggle intensified within multicultural urban space for possession of strategic turf through distinct agents: the Corporate City's New Spitalfields Market, the Bangladeshi community's Banglatown, and the neo-conservative Middle Class 'Georgian Heritage Spitalfields'. In that sense, the lavatory site occupied a pivotal position in market force terms, underwritten by cultural polarities.

Through the public lavatory's conversion, the intention was not to capitalise the development as real estate but to intervene in a contested context as a cultural process, one that amalgamated de-valorised and over-valorised forms of work publicly. Thus all Public Life activity, self-generated and unprogrammed, in mainstream or arcane genres, critically depended on the self-making of an internal labour pool through its cultural operations. Meshing service sector work (which underwrites the art market without visibility) internalised within a community (artists) brought up critical fault lines that were internal to Public Life as a process, whilst opposed to the external conflicts posed by speculative market forces[13].

This essay is not the place to analyse these projects individually but to distinguish the three in terms of distinct spaces of cultural engagement within a praxis as process: the public march was a single process that converged multiple social forces through a single action, but also a key temporary bridge to ongoing external processes; Fashion Street served as a host space for two distinct processes, arguably self-segregating, threaded through at the same time; Public Life as a public utility condensed conflicting threads of valorisation into a tiny capsule on a street pavement. Common to these autonomous processes was the construction of scenarios with conflicts internal to each.

An emergent process in its course generates such new spaces both internal and external; these have to be resolved solely through the means and imperatives of the praxis itself, by the way it propels, sustains and reproduces itself. An autonomous process has recourse to no other frames or appeal; its aesthetic sensibility is linked to its own trajectory, its autonomy and thereby its transversal potential. A useful

scene; inevitably this was paralleled by the redevelopment or emergence of large institutional spaces and new strategies of engagement through community out-reach projects.

[12] David Harvey, 'The Urban Process Under Capitalism: A framework for analysis' (1978) from Gary Bridge and Sophie Watson, eds. *The Blackwell City Reader* (Malden: Blackwell Publishing, 2002)



Public Life under construction

[13] Further information on Public Life, including press-cuttings and essays, may be found at www.publiclife.org

concept in the consideration of this autonomy is Guattari's 'coefficient of transversality' which he illustrated by imagining a field full of horses wearing adjustable blinkers that circumscribe vision. The coefficient of transversality is precisely controlled by adjusting the blinkers[14]. To sustain the continuity of an autonomous process over a length of time, the coefficient of transversality has to be weighed against the coefficient of (consume-able) visibility. The two things – transversal-perception and spectator-visibility – are entirely different entities and tools. How a process navigates between them in a live public theatre over time defines how it shapes itself in time and so intensifies or, otherwise, how it channels into given frames of representation (for example as art) or circuits of contestation (as activism). To further extrapolate: if a process dispenses with the need for its representation, this does not mean that it dissipates into nothingness, but that it is only recoverable in terms of the visualisation of a (cultural) ecosystem: an ecosophic totality that requires a different aesthetic undertaking, and a different notion of cultural circulation, exchange, and causality.

[14] Gary Genosko *Life and Work of Guattari, From Transversality to Ecosophy* (London: Continuum, 2000)

Circulation Modules and Cultural Quanta

In *Energy and Equity* Ivan Illich describes how high levels of energy (consumption) degrade social relations just as inevitably as they destroy the physical environment; to quote 'if a society opts for high energy consumption, its social relations must be dictated by a technocracy and huge public expenditures and increased social control; both rationalize the emergence of a computerized Leviathan'.[15]

[15] Ivan Illich *Energy and Equity, Ideas in Progress* (London: Marion Boyars, 1974)

For equity to have correspondence or representational value, Illich uses concepts of 'per capita quanta' and 'socially optimal energy quanta'. As our everyday lives are increasingly defined by capital-intensive forms of representation and communication, the concept of quanta is useful for the visualisation of an ecological dimension to culture. Illich uses the concept as a tool to figurate a balancing equivalence process bridging fundamentally different entities within one ecologic frame. Quanta are equally a means of adding new dimensional possibilities to the theatre of cultural production and transposing them onto existing structures of social reality. Deleuze and Guattari, in 'Micropolitics and Segmentarity'[16], use the notion of quantum flow as a means of overcoming the binary opposition that existing structures

[16] In Deleuze and Guattari (1988)

of 'segmented' reality derive from. Quantum flows 'reshuffle and stir up' rigid instituted segments through connection and conjugation across the extremes of scales, time and space, cycles of macro-history and micro-history, the macropolitical and micropolitical. In such terms, a quantum flow fathoms new circuits and circulation but without a prescribed form. The form derives from the specific application within a particular context, a defined theatre of operation. The potential challenge is to visualise such theatres in living social contexts. Giving material form to the idea of cultural quanta leads to the production of new dimensions of social circulation, with use-value and exchange value, which operate in spaces parallel to that of normative consumer space. The appliance of 'per capita quanta' implies its own theatres of cultural operation through multiple means, collective and individual, virtual and material, that initiate circulation threads in living contexts.

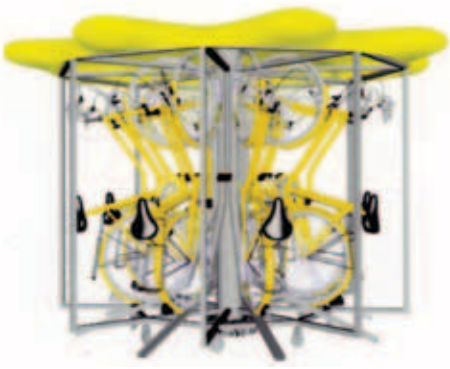
To suggest possibilities: my proposal for the *Living Memorial to Ken Saro Wiwa* in 2005 began with corresponding the circulation of self-generated bicycle-powered energy with a visual output using LEDs (light-emitting diodes) and a communication network (using SMS). The three working together would be the start of a self-organising cycle for a living memorial that would evolve with time. The memorial would work as a 'scenarios engine' in public space, in the service not of corporate strategists but of civil processes. The 'scenarios engine' as a communications network would progressively be appropriated by the public. As the proposal developed, the LED modules scaled up into 6 m spherical structures of carbon C_{60} molecules, to float over the skyline on carbon fibre cables (through discussions with the structural engineer Mark Whitby).

Based on a rate of energy transfer of only one kilowatt, the memorial proposed a self-reproducing energy and communication loop. The circulation of 'quanta' in this loop and its scale of economies depended on the potential space created by public appropriation of the loop; that is, the loop could theoretically up-scale, down-scale or multiply in correspondence with its use in the networked nature of globalised public space and the new dynamics of dispersal and centralisation[17].

Another process using the circulation of mass rather than information and light was initiated in 2003 and involved twenty 7 m^3 waste containers (or skips, as they are called in England). The skips collected waste around North-East London, mainly in the borough of Newham, the most multicultural corner of London.



Bicycle Tree, designed for left-over urban spaces http://xyzlondon.com (Siraj Izhar, 2003)



Bicycle Tree model with yellow (Circle Line) bicycles (Design release by Siraj Izhar with Masa Miyamoto, October 2003)

[17] Scheduled for construction in London at various sites in 2008 in association with the Remember Saro-Wiwa coalition www.remembersarowiwa.com www.stalk.net/LivingMemorial



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un skip project
200 Marlborough Road,
Romford, Essex
31 October 2004



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s_i skips
Waste collection and
recycling, London.
(Siraj Izhar, 2004–07)

The process outlined a map, with both physical and cultural reach, whose territory was bound by economies of scale on two fronts: by the logistics of the tonnage mass of waste – dead weight – moving around a territory, and the mobility of the labour involved in the recycling of this mass – an informal sector. Whilst the environment today is increasingly valorised in the marketing of a green economy, the labour it depends on is predictably de-valorised. In an ongoing project dealing with metaphoric cultural debris, several parallel forms of social and material quanta intersect in circulation routines that silently produce the new formations of London's civil society.

In both of these instances, a circulation process as a praxis is constructed over time, and by its everyday working continuity, penetrates and propels itself to create its working landscape. Through the practical imperatives of its continuity, the circulation inter-relates segregated strands in the landscape, strands that Guattari referred to as the segregated ecologies of environmental, mental and social worlds. In *Steps to an Ecology of Mind*, Gregory Bateson describes the mental state he called the double bind as a state of conflicting demands that incapacitate the subject, disabling a possibility of resolution through action. The double bind arises through a failure to intuitively correspond different strands of reality and communication – distinguished by Bateson in terms of 'language and meta-language' to differentiate between text, speech, gesture, affectation and the multiple ways in which exchanges of meaning take place. Through its failure to correspond and correlate, the double bind sustains a sense of understanding and perception riven with gaps, a containing structure of reality trapped within the production of communication[18].

In an analogous way, the double bind describes the social function of the injunction 'There is No Alternative', TINA. Both disable the connective link between perception and commensurate action. Both create a 'stop', an unbridgeable space between seeing and acting. It is this space that a praxis as process entangles with as a means of contesting the status quo in the here and now through its distinct characteristics of sustainability, continuity and autonomy. As stated before, this is a messy, complicitous undertaking embedded in the real-politics of situated practice, and often distant from the managed spaces sanctioned for art.

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[18] Gregory Bateson *Steps to an Ecology of Mind* (Chicago: University of Chicago Press, 1972)

SQUARING THE CIRCLE, CIRCLING THE SQUARE

Misfits, miscreants, square pegs in round holes... or round pegs in square holes? Bill, Manu, and Mukul cast distorting eyes over London, presenting twisted geometries on the Lomowall in Trafalgar Square and running workshops for visiting lomographers. Mukul's *A man, a plan, a canal – London!* walk took congress participants 7 km along Regent's Canal towpath from the Angel to Docklands, past houseboats and lofts, under willow trees and over locks, dodging commuters on bikes and cops in choppers, where the water reflects Victorian warehouses, Hitchcock's studios, and postmodern skyscrapers. Manu's *Big Brother City (1. smile... 2. shoot back!)* began with a guide to surveillance in London and ended in a cam-spotting urban tour, for which she added an 11th rule to the 10 'golden rules' of lomography – every image must contain a CCTV camera in the frame.

Bill McAlister, Manu Luksch, Mukul Patel
2007

Lomographic panels (using multi-lens, fisheye, swing-lens panoramic and medium format cameras) and workshops for the Lomography World Congress, September 2007, London
www.lomography.com

Indigo indicates the 12 panels of the Lomowall made by Bill, Manu and Mukul



Naseem Khan
2007

The Friends of Arnold Circus came about as a spontaneous reaction of a small core of local people distressed by the run-down and disreputable state of a beautiful and historic site. A rare bit of green open space in a deprived part of Shoreditch, it was shunned by most people in the vicinity. The organisation rapidly acquired 500 members and charitable status. www.friendsofarnoldcircus.wordpress.com

The Friends' activities have brought Arnold Circus back into the life and awareness of local people. An annual Carrom championship, the Picnic where dishes are shared and cyclists challenged to complete 100 revolutions of the Circus, and music (from brass bands to Bengali vocals) – not to mention the fabulous Circus on the Circus in spring 2007 – now bring in hundreds. The Friend's outreach program involves schoolchildren who come to garden; women who are embroidering a wall-hanging that embodies their responses to the natural life of the Circus; and the elderly, whose memories are being recorded.

ARNOLD CIRCUS GHOSTS

Who can ever claim to fully own anything? Bits of land and chunks of masonry may be given the official accolade of 'heritage'. But really, 'heritage' is not a static and finite thing. It needs to be re-owned, re-invented, re-modelled, re-defined and re-adopted, over and over again.

Arnold Circus in Shoreditch – with its Grade II listed bandstand – may look solid. It stands there proudly at the epicentre of seven incoming roads, giving seven different views of it. But really there are innumerable ways of looking at it.

When the brand-new London County Council took the decision to demolish the notorious slums of the East End in the 1880s, they had the vision not to simply throw the debris out. Instead they had it fashioned into a small hill with gardens on two tiers, a capacious plateau on top and a delicate little bandstand right plumb in its middle.

It was a rare place, right then – a place for socialising, sitting in deckchairs in ones best clothes, marvelling at the ferocious moustaches of the uniformed band leader and listening to regular oompah sounds of the plummy and comforting brass band.

'What lies underneath Arnold Circus?' children of the nearby Virginia Primary School were asked in the course of a recent writing exercise. 'Dead bodies,' they said.

It was unrespectable and they weren't allowed up onto it, said a couple of young Bengali women who had grown up on the Boundary Estate that surrounds Arnold Circus. Gangs were held to inhabit it. (Or were they simply groups of youths bored out of their minds who'd taken over the bandstand as their private domain?)

Make your way around the circular walkway and you can see other signs of fleeting ownership. Tendrils of pumpkins secretly planted in the night by Bengali guerrilla grannies twine up the iron arches at the foot of the steps. Another invisible hand has buried a pet rat in one of the flower beds and occasionally you can find a joss stick burning over the grave. In the bushes, mobiles made by children in one of the events run by the Friends of Arnold Circus twirl in the wind.

Look again.
There's detritus left by clubbers after a heavy night out. Congealing chicken tikka, pallid chips scattered like an obscure cast of the I Ching.

Vomit, and – one morning – a large human turd planted fair and square in the centre of the bandstand.

Dogs, little and large.

Dog walkers (little and large).
Lone lunch takers.

There is a tenuous feel to Arnold Circus. It feels like a ship of history that is only lightly tethered to the ground and that shudders slightly as the unsightly 78 bus rumbles its crass and needless way around the Circus. It almost seems to float ghostlike at the end of its seven feeder roads, with its six tall plane trees and its sleeping-beauty bushes. And whether or not you give any credence to the powers of ley lines, discovering that Arnold Circus itself sits firmly at the end of one ley line has a peculiar kind of rightness about it.









Lomographs of Arnold Circus
by Bill McAlister, 2007





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esc (EmptySpaceChiangmai) is a complex of five traditional teak Thai farm houses situated in Northern Thailand near Chiangmai. Built on the edge of rice fields and overlooking the mountains of Burma, the independent space is run by Noi and Manuel Lutgenhorst and includes an open air stage, ceramic studio, and video edit suite. esc hosts theatre camps, workshops, performances, artists in residence, and (from 2008), regular masterclasses in Asian Puppetry. International collaborations are encouraged, and esc is rapidly developing into a destination for artists in the Mekong Region. www.emptyspacechiangmai.info



As translated from a long-perished cant by the **Last Mango in Paris**

Photos by **Chris Helgren** and **Manu Luksch**

EXTRACT FROM THE JOURNAL OF NEWBIUS JOACHIM VINCENT PRAKASH RIPPERTON, 3RD EARL OF UTTAR ATAXIA

On approaching the coast of that green and pleasant land, we were unexpectedly beset by pirates. Despite a queenly struggle, I was manhandled by two gargantuan brutes with forearms the size of my mother's infamous pumpernickel loaves. The experience was not altogether unpleasant. They hauled me below deck, where I was shocked to see an arboretum – on a ship, no less! What was this strange world I had been sucked into?





All manner of strange and exotic shrubs bloomed around me – seas of crotons, aloes, sassafras, and an unimaginable variety of purple-flowered cacti. The floor veritably writhed with unusual creatures that I had not encountered before: ancient wrinkly beasts with shells on their backs, into which they retreated when sleeping. Before me towered a wiry skeleton of a man with a shock of white hair, astride a machine that resembled a horse. He asked me to remove my outer garments (it was my pleasure to oblige) and passed me a piece of card no bigger than the tiniest pinch of snuff.



The card bore a picture of an Oriental goddess, wearing a garland of skulls around her blackened neck. The skeleton man asked me to place the card under my tongue, which I did, albeit reluctantly. It was obvious that I was being prepared for some primitive ritual. A hatch in the floor swung open, and the air was filled with dense smoke and a heady aroma not unlike that of frankincense. Out of the smoke emerged a vision.



Half man, half cat, he wore a kimono fashioned by legendary woodcutter of yore, Missey Iyake. His right eye was covered with an indigo eyepatch. On his left paw rested a parrot whose jaws had been bound together with wire that cruelly cut into its beak, and over his shoulder was a bag which vacillated from side to side. Though the creature's lips did not move, I heard him say, 'It is full of amoeba, my friend. Amoeba.' He smiled at me – and this smile penetrated to my core. It was in that moment that I knew we shared a commonality rooted in humanity's hidden desires.



The shock-haired general straddling the mechanical horse cleared the phlegm from his throat and growled, 'Endtroducing his sexcellency, the Grand Turq Loukoum!'

The sartorially splendid beast smiled once more, lit a cheroot and took me by the hand down rickety wooden stairs into a chamber filled with thousands of black, shiny discs. I could have sworn I saw a huge dragon scuttle into the darkest recesses of the chamber's ceiling, but on further scrutiny I could detect nothing. I felt my captor's eyes burn a hole through the back of my neck, and again I heard his voice in my head: 'Everything is true. Nothing is sacred.'

I turned to the Grand Turq. He smiled, and mouthed, 'Nothing is true. Everything is sacred.'

I gasped incredulously. Had this kingly creature also come across Hassan i Sabbah's garden of earthly delights, upon whose gates was inscribed this unholy aphorism?

The Turq Loukoum prepared by his own paw a dish of piquant peas, and after we dined he poured a thick black medicine into a thimble. I should have known better than to drink it, but I was disarmed (nay, dismembered) by his feline charm. Instantly I fell into an inebriated stupor, accompanied by dreams of a giant black incubus, hair matted into rope-like strands, who sat on my face and tutted disapprovingly...

I woke on the roof of a palace in a strange city. Black birds circled and squawked incessantly, as if warning me to the strange scenarios that were to unfold before my eyes. Ebony males in dresses stood on their hands balancing trays bearing champagnes and canapés, which were devoured by a Bohemian crowd of salubrious characters who danced the fandango and spoke in tongues. In each corner sat groups of coolies, punching away at what I assumed were counting machines.

Later I learned that these click-clacking devices were called mouseapples; which can be no coincidence, for on a throne in the centre of this maelstrom of sin sat a flame-haired woman, the spitting image of the fabled temptress Lilith.

A chocolate-skinned pagan in drag wailed, 'Hail Una'amlux! Queen of the Crucible!'

The impressive matriarch conducted the throngs of gyrating heathens. Slowly, as my eyes became accustomed to the blackened night, I began to establish the identities of other orchestrators of this veritable orgy of gluttony and perdition. A tiny damn-Asian devil span like a whirling dervish and uttered spurious, strangely exhilarating incantations. His bald pate was graced by a feathered mask. A clandestinely camp custodian carved copious cuts of casu marzu, ably assisted by a small mountain of a woman I recognised from pornographic etchings of the Victorian era; it was none other than Koko De Mari, infamous for her exploits with raw fish!

Turq Loukoum was obviously complicit in engineering the complaisance of this seething mass of godless hoofers, hypnotising them with a horrific myriorama of a paranoid king













bedevilled by his own shadow. Like a puppeteer, the Turq stood with his paws up the backsides of two small brown boys who governed a tower of mechanical devices before them. A strangely sweet sound emerged from vibrating surfaces encapsulated in a series of large wooden boxes. Amidst the waves of tintinnabulation, I deciphered a reversed message repeated ad infinitum: '706090 0499 code'. I scribbled down the digits furiously (in the hope that they might beckon to me a time-travelling Hackney Carriage to bear me to my beloved) but on doing so, felt a paw on my shoulder, and *that voice*, redolent of silk, cinnamon and scientific malpractice, bouncing across the rooftops like a Shakespearean sonnet on heat:

'Ladies and gentlemen, charge your glasses and polish your asses; we are never going home...'





SIDELONG GLANCES

5. Closing the loop

5voltcore's *Shockbot Corejulio* is a computer-robot-screen assemblage that shorts its own circuits, generating random images until it destroys itself – a relatively closed system running a relatively open process. Its one conceit is that it presents itself as spectacle.

Tighten the noose: populate the deserts and oceans with thousands of these automatons, drawing their power from sun and wind and waves, rasterising in the wild. Artifical life's but a walking shadow, a tale told by an idiot, signifying nothing.

Mukul Patel
2007




31~12~02
01~01~03




LOOK FAR EAST


THE HOUSE
www.houseofkurtz.org
september 19 2002


STUT-UTTERER-ER
mukul 1997


if on a winter's night a traveler
mukul
berkeley
nov 2000




JAMKA
at ambientspace


mukul mixed it
1997
indiska /
r.f.interference


frühstück mit wolfgang


frühstück mit wolfgang


The SPACE Age Sirens
led by Lake D.
in collaboration with
Manu Lokash and Mukul Patel




23


MUKUL 2004
MUSIC FOR dance


THE STOLEN KISS


belladonna
mukul

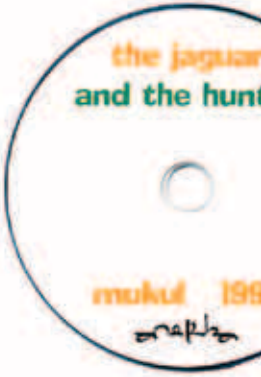

allah who?
turquish blue!
mukul DJ set at the freedom café,
soho, london 1997
for rana salam




FROM ambient SPACE


Marine Drive
mukul


the jaguar
and the hunter
mukul 1997


the jaguar
and the hunt
mukul 199


mukul 1999
BRAZILNUT
BANANA


bollywood nightmares
mukul 2002


RADIO FRO
MUKUL
DJ SET
27-10-2002




BRAZILNUT
BANANA
bonus pool


Love is Life


THE BURNING TRAIN






AQ HAQ AAQ MA


VIRTUAL BORDERS
จินตยภาพ
soundtrack CD




MOSCOW · PRAGUE · LONDON


1: mukul vs saul


2: mukul vs equal-i


3: equal-i vs muku

Armin Medosch
2007

AMBIENTTV.NET: OPEN DOORS, OPEN PROCESSES

Get Fresh in 1997

1997 was a good year for underground dancefloors in London. Tina Moore's 'Never Gonna Let You Go'[1] sweetened even the greasiest breakfast at Tony's cafe on Broadway Market. The Blue Note club in Hoxton Square hosted groundbreaking nights including *Metalheadz* (which took drum and bass overground), Ninja Tune's *Stealth*, and the genre-breaking *Anokha* (literally, 'unique'). The sound of the city heralded an eclectic future, optimistically global. Developments in neighbouring Shoreditch were nearing the tipping point of hip. Artists had moved into Hoxton's abandoned warehouses in the 1980s; by the early 1990s, the area had become identified with the YBAs (Young British Artists). And now word had spread. Once lacking even a decent convenience store, the square was packed with bars, galleries, design studios, and web professionals, and the ShoHo (Shoreditch-Hoxton) effect was being felt in Brick Lane and the City borders[2].

New Labour had been voted into power with a huge majority, ending 18 years of Tory rule. The previous year, *Newsweek* magazine had pronounced London 'the coolest city on Earth', and Labour's Culture Secretary Chris Smith was quick to capitalise on the new optimism by branding Britain 'Cool Britannia'[3]. She no longer ruled the waves, and had willingly destroyed her industrial backbone – but she was sexy, talented, and confident. Hopes ran particularly high in East London. Trendies in sharp finned haircuts sprang down Curtain Road, speed-talking into their mobile phones, DJ bags slung around their shoulders, baggy trousers hanging low over unreleased trainers. People who would have been – or actually were – squatting in the 1980s were now starting up dot-coms. The Internet industry was hyped: young designers knocked together multimedia animations for corporate clients buying into 'web guerrilladom', and blew the surplus on art projects and lengthy research trips to exotic locations (holidays). *The Guardian* trumpeted the advent of the 'flexicutives' – young entrepreneurs with a bohemian touch who embodied the new value system that merged urban cool with making lots of money[4]. One friend later said, 'it was all crap but I liked the leather sofas.'

[1] Tina Moore 'Never Gonna Let You Go', written by Tina Moore and Tommie Ford. 12" vinyl single (London: Delirious)

[2] Simon Pope summarised the mood in his piece 'After the revolution, the after party' in *The Futile Style of London*, available at: http://bak.spc.org/iod/cuba.html

[3] 'Cool Britannia' was the name of a dessert made with vanilla ice cream, strawberry, and choloate-covered shortbread confection launched by the Ben & Jerry's ice cream company in 1996, and since discontinued. The dessert was developed by an American lawyer living in London for a recipe competition. *Editor's note; hereafter: [Ed]*

[4] 'Flexible friends', *The Guardian*, 4 February 1999. www.guardian.co.uk/flex-exec/Story/0,,208727,00.html

CREATIVELY TASKED

It was also in 1997 that the newly created Department of Culture, Media and Sport (DCMS) launched the Creative Industries Task Force, which published its first Mapping Document the next year[5]. This document summarized the contributions of what it defined as the cultural sector to the nation's GDP. A very broad range of activities fell under the definition, including advertising, leisure software (games), music, fashion, and arts and antiques (a single category). There was no doubt about the strength of some of these industries; even so, the Document inflated the overall economic impact by including many peripheral activities, such as catering in theatres.

The 20 years preceding the publication of the Mapping Document had witnessed fundamental changes in arts funding policies. Subtle shifts in language masked profound political transitions. The term 'culture industry' had been introduced by Theodor Adorno in the 1940s to point out the fundamental incommensurability between the arts and capitalism, which made the art work subservient to economic rationality. European cultural policy in the 1970s reflected this critique to some extent; the market-driven cultural products of the US were seen to pose a cultural threat to both popular/folk forms and 'high' art. But the threat was also perceived to be an economic one. Both Left and Right formulated protectionist policies, with the Right, under the sway of romanticism and idealism, tending to support 'high' art such as opera. Meanwhile, the younger generations turned their backs on 'high' culture, instead expressing their energy through trends such as pop and punk, both suffused with a DIY (do-it-yourself) approach. These movements became not only fashionable, but also academically validated through the burgeoning field of Cultural Studies and the advent of the postmodern stance, which collapsed the traditional dichotomy between 'high' and 'low'.

In the early 1980s, the left-leaning Greater London Council (GLC), led by 'Red' Ken Livingstone, developed the idea of the 'cultural industries'. GLC policymakers came to regard popular youth culture as containing legitimate, grassroots movements that could articulate a radical politics of ethnic and sexual diversity. The GLC highlighted sectors such as rock music that were significant creators of cultural and economic wealth, and outside the scope of public funding, but nonetheless vulnerable to market vagaries. The proposition was to intervene in the market to support such industries, thereby promoting a social democratic idea of cultural production and

[5] Available from www.culture.gov.uk/Reference_library/ The DCMS is responsible for the government policies on 'alcohol and entertainment', tourism, and gambling, among others. Before 1997, the DCMS was known as the Department of National Heritage.

distribution that would also generate employment, rather than offering the traditional subsidies to the establishment 'high culture'. But the central government under Margaret Thatcher had a profound distaste for disbursing grants[6], and saw little reason to fund artists who were loudly oppositional. By 1986, the GLC and the six other Labour-controlled Metropolitan County Councils had become too much of an annoyance to the centre, and they were simply abolished.

For the next 14 years, London survived despite a lack of a central planning authority. By the turn of the 1990s, it had become evident that some groups of 'cultural producers', including pop musicians, fashion designers, and occasionally even filmmakers, contributed very significantly to the economy. Fortuitously, these groups had little (socialist) revolutionary fervour left after nursing hangovers from the Second Summer of Love (1988–89)[7]. What they needed was a way to shift more product. With the release of the NCSA Mosaic web browser in 1993, the Internet awoke from its academic slumber and became populated[8]. The conjunction of distributed information services and the exploding pop mainstream laid the foundations for an entirely new cultural-economic model.

In the 1960s, prophets of the new society had claimed that 'the rapid convergence of media, telecommunications and computing was sweeping away the economic, political and cultural certainties of the industrial age'[9]. What made the difference in the 1990s was the paradigm shift to digital networked space, the most potent expression of the promised post-industrial society where the privileged trade only information. Marshall McLuhan provided a theoretical framework for the understanding of social change at the close of the 20th century. The advent of information society would inevitably lead to the hegemony of creators of information: the immaterial labourers, the 'digerati', the virtual class. In the 1990s, ruling bureaucrats, politicians and think tanks eagerly bought into the concept of a new class. And when the DCMS introduced the term 'creative industries'[10], it was the 'digerati', the new class of cultural entrepreneurs on the Net, that was to be the vanguard for its policy[11]. In East London in 1997, a particular instantiation of the new class could be studied in a small biotope. The web impresarios, club-night organisers and art people rubbing shoulders in the 'creative cluster' around Shoreditch and Hoxton transformed it into ShoHo, hipper and younger than the old centre of the media industry, Soho.

[6] 'I think we've been through a period where too many people have been given to understand that if they have a problem, it's the government's job to cope with it. "I have a problem, I'll get a grant." "I'm homeless, the government must house me." They're casting their problem on society. And, you know, there is no such thing as society. There are individual men and women, and there are families.' Margaret Thatcher, *Women's Own* magazine, 31 Oct 1987 *[Ed]*

[7] In the UK, the summers of 1988 and 1989 witnessed the explosion of the acid house/free party scene, fuelled by various flavours of electronic music, LSD and ecstasy; there are parallels with the Summer of Love (1967, San Francisco) *[Ed]*

[8] A network of academic and government networks (internetwork) grew from the 1960s (initially in the US, later linking to Europe in the 1970s) and developed into what has become known as the Internet in the 1980s. Until the late 1980s, it was a strictly commerce-free zone.

[9] Daniel Bell, quoted by Richard Barbrook in *The New Class* (London: Creative Workers in a World City/ Openmute, 2006)

Whilst bearing a resemblance to the old GLC idea of the 'cultural industries', the new 'creative industries' concept dispensed with the hope of social redemption through cultural practice; instead, it revolved around the exploitation of intellectual property (IP) for profit. As Britain was one of the few net export earners of licence fees related to IP, creativity and cultural entrepreneurship were seen as significant contributors to future economic development of the nation. In subsequent reports and analysis the growth rate of the creative industries was usually given as double that of the 'normal' economy[12].

Peculiar to many of the products of the creative industries, as defined by the DCMS, is that they are positional goods – they serve to distinguish the cognoscenti. Moreover, they tend to be goods for which tastes are suggested through marketing and finally acquired through consumption. Thus the creative industries exemplify a sophisticated late capitalism. But for many artists, the calculus was not performed in monetary terms. Indisputably, the UK was buzzing – despite the policymakers proclamation of 'Cool Britannia' – and it was a relatively innocent enthusiasm that prompted multi-instrumentalist Talvin Singh to describe the *Anokha* club nights as 'tastemaker sessions'. (Entry was a modest £3).

'Cool Britannia' as an exercise in nation-branding was a short-lived failure, whose demise was hastened by the growing crisis in UK agriculture. The Right ridiculed the idea that the label 'cool' might be sufficient in attracting major foreign investment. Nevertheless, an eager Tony Blair, playing on his relative youth, continued to invite a stream of (not quite cool) rock stars to official receptions. Soon, however, most of the artists realised they were in danger of becoming quasi-official ambassadors for a government that was quickly losing its shine. Cold-nosed Britannia notwithstanding, the strategy to promote and exploit the creative industries remained in place.

THE FALL OF SHOHO

The hype around the new creative class had a massive impact on the property market in inner cities, particularly in East London. The industrial decline of the 1970s and early 1980s had left many urban areas derelict. From the 1980s to the mid-1990s, artists had taken over some quite spectacular factories, warehouses and canal fronts. The media declared the locale hip, and investment poured in. In the midst of the 1990s new economy boom, as Shoreditch became web-designer central, property developers followed hot on the heels[13].

[10] 'Those activities which have their origin in individual creativity, skill and talent and which have a potential for wealth and job creation through the generation and exploitation of intellectual property.' (DCMS, 1998)

[11] Ideas about a techno-cultural elite have a deep historical context, as Richard Barbrook has pointed out (op. cit.). The popularisation of the idea of the 'knowledge economy' dates back to at least the early 1960s, when Austrian-American economist Fritz Machlup published *The Production and Distribution of Knowledge in the United States*.

[12] *Creative Industries Economic Estimates, Statistical Bulletin, October 2005 – Revised Version* (DCMS, 2005)

[13] 'By hanging out in these urban villages, the Cybertariat can help each other to find new jobs, learn new skills and discover new ideas. Alongside the traditional duo of the market and the factory, the network has become the third – and most modern – method for organising collective labour.' (Barbrook op. cit., p. 38)

Then, the people who had turned Notting Hill (in West London) into a millionaires' ghetto began to move east[14]. The area underwent continuous, rapid, and dramatic change, reaching its logical conclusion within a few years – the boom killed off its own reasons for being[15]. The Blue Note was forced to shut down because of complaints from new neighbours, while around the corner, independent bars and restaurants that were only two or three years old were taken over by better-heeled proprietors. By summer 2007, once-YBA haunt The Bricklayers Arms had shut its doors, and exclusive private members' club Soho House had opened its East End branch (annual fee: £700). A commercial consumer culture took over, and almost everything that had made the area interesting in the first place disappeared.

The fall of ShoHo was substantially a result of astonishing price rises caused by property speculation, and a foreseeable effect of government policy. Just as the GLC's 'cultural industries' policy was revisited in a transformed manner by the DCMS, so government for the city itself returned in 2000 in the form of the Greater London Authority (GLA), led once again by Ken Livingstone[16]. The new Mayor's agency for strategic planning was called the London Development Agency (LDA). What had happened in Shoreditch in an organic manner became the blueprint for future inner city regeneration under the LDA's Creative London scheme. The LDA claimed to cherish 'the city's New Independents and Free Agents'[17], the digital artisans concentrated in Shoreditch. The hope was that an open, cosmopolitan environment would foster a culture of creative risk taking and lucrative innovation, as it had in other urban villages such as San Francisco's SoMA (South of Market Street). By the late 1990s, it had become standard policy to deploy new cultural spaces as vanguards for regeneration. But without adequate controls on developers, it was a policy that could not benefit the existing inhabitants. By the time the White Cube 2 gallery opened in Hoxton Square in 2000, many of the artists who had put the square on the map had moved on. Behind the Square, to this date (2008), social housing blocks that accommodate hundreds remain conspicuously unimproved.

In the 1990s, the phantasm of a particularly profitable class of 'creatives' started to become every European government's wet dream. A decade later, the 'creative industries' became a focus for the British Council's overseas 'cultural diplomacy'. Beguiled by the promises of the Internet, and mesmerised by creativity unleashed from the (digitally) hip, administrators in

[14] John Barker, 'Reader Flatteries – Ian Sinclair and the Colonisation of East London' [online]. *Mute* magazine, 7 July 2006. Available from: www.metamute.org/?q=en/reader-flattery

[15] 'One day we looked out of the window and saw lots of people with mullets. The next day the landlord came round and doubled the rent and we had to move [...] Before, the area was driven by people's work. Now it's driven by people going out in the evening.' Fashion designer Alexander McQueen interviewed in *The Guardian*, 21 November 2003: 'Where have all the cool people gone?' http://arts.guardian.co.uk/features/story/0,,1090073,00.html *[Ed]*

[16] Despite being not quite so Red, Ken Livingstone had another battle with a Prime Minister – this time, from the Labour Party – as Blair attempted to block his standing for the post of Mayor. *[Ed]*

[17] Barbrook op. cit., p. 38 quoting GLA *Economics, Creativity: London's Core Business*, p. 33 (London: Greater London Authority, 2002)

the arts sector have begun to rewrite funding policies. The erosion of historically important values has taken on various forms, from the instrumentalisation and commodification of the arts at all levels, to the implementation of media industry restrictions on copying. But the full picture is much more complex than this abbreviated history suggests. The Net has not only brought back entrepreneurship into business, but also encouraged strong movements that do not obey the commercial maxims implied by the term 'creative industries'. Far from being bent on collectively safeguarding the future economic success of the nation state, artists and activists are proposing alternative value systems. Whether through socially engaged practice with art and technology, or through technical solutions for an always-on, networked society, models of sharing and collaboration in the digital commons are 'selling' themselves without ad companies creating desire. The practice of East London-based ambientTV.NET exemplifies a possible approach to the construction of an aesthetic and ethical community in the present.

The Emergence of ambientTV.NET

Early in 1997, Manu Luksch arrived in London. The Vienna-born artist settled in Hackney Road, a 10-minute walk from Hoxton Square and equidistant to Broadway Market, where she would later establish the ambient.space studio. Almost immediately, she encountered two individuals who would greatly influence the direction of her work. Sophie Poklewski Koziell, with whom Luksch shared an apartment, was writing a book on DIY and direct action movements in the UK[18], while in South London, James Stevens was applying the DIY ethic to digital networking. While she had been studying at the Academy of Fine Arts in Vienna, Luksch had made a 16 mm short (*So Oder Anders*, 1994) about the regeneration of a market square[19]. She was already working outside the frame, though, having assisted the production of Peter Greenaway's exhibition *100 Objects to Represent the World*, and compiling a CD-ROM (*to be continued*) of students' work. In 1995, she was invited to manage the online presence of Hamburg Expo 2000 by the Media Lab Munich, of which she subsequently became Artistic Director. A year later, she visited the Next 5 Minutes (N5M) 2 festival in Amsterdam[20]. N5M 2 emphasised the tactical qualities of media – its social and political potential, media as a tool, and many-to-many broadcasting. As such, it bore a stark and refreshing contrast to the long-established Ars Electronica, which Luksch described as a temple for the

[18] Elaine Brass and Sophoe Poklewski Koziell *Gathering Force: DIY Culture – Radical Action for Those Tired of Waiting* (London: The Big Issue Writers, 1997)

[19] During the filming, fires broke out twice in the square. It later transpired that insurance company Wiener Städtische had made a deal with the district authorities to redevelop the square. No charges of arson were brought. *[Ed]*

[20] The tactical media festival Next 5 Minutes has been held every few years in Amsterdam since 1993, when the theme was the 'camcorder revolution'. Discussing the N5M 2 festival in 1996, Luksch had already proclaimed the high-tech media installation format moribund, 'killed by flirtations such as art-activism, art-science, and art-social sculpture'. www.next5minutes.org

worship of high-tech 'high art'. N5M 2 could be seen as part of a historically opposed tendency to such fantasising by the elite – a tendency that admitted the possibility of radical change from below. For Luksch, N5M 2 was a revelation – it instigated her thinking about the convergence of older media, such as experimental film and documentary, with the Internet. Later, in London, she would come to a more robust formulation of her ideas as she recognised the transformative possibilities of hybrid media.

DIRECT ACTION IN THE UK

In the Hackney apartment shared with Poklewski Koziell, Luksch very quickly learned of the breadth and depth of the direct action movement in the UK[21]. Driven by a grassroots environmentalism, diverse protest campaigns fought for land rights and civil liberties and against roadbuilding, airport expansion, genetically modified crops, and the export of live animals for slaughter. On one occasion, the two women visited the iconic Swampy who was part of an occupation of Manchester airport. Dissatisfied with the failure of traditional politics to respond to their concerns, infuriated by encroachments upon civil liberties designed to quell protests, and despairing of the mainstream media's usual fare, ordinary people were acting, and ensuring that their actions were reported. Protesters built villages of treehouses, dug elaborate tunnels, chained themselves to the sites, and coordinated their strategies and disseminated tactics through vibrant publications such as *SchNEWS* and *Squall*. Impressed by the scale, ingenuity and media-awareness of these movements for a more habitable future, Luksch would next encounter an exemplary open space where visions of the digital future were being nurtured.

BACKSPACE TO THE FUTURE

In 1996, James Stevens was part of an early, small web design and hosting company called Obsolete, located in Winchester Wharf on Clink Street near London Bridge. (The building was also home to record label Ninja Tune and interactive audio collective Audiorom, among others). Stevens' interest in commercial web work was limited, but he took advantage of the available ground floor space below Obsolete, and of the high speed bandwidth, to set up Backspace. Occasionally described as an Internet café, Backspace didn't sell coffee, though there was a donation box in the kitchen. Online access was through a monthly subscription model, and minimal rules and costs gave the space a spirit of independence and openness. Uniquely, Backspace brought together a very diverse group

[21] The direct action movement in the UK has a long history. One immediate precursor to the 90s environmental protests was the Greenham Common Women's Camp that began in 1981, against the siting of US nuclear cruise missiles at RAF Greenham Common. But the roots stretch back to the first anti-enclosure movements. Enclosure, the privatisation of once common land, gathered pace in the 15th and 16th centuries in Britain. It was denounced by the Church and initially even by government. The anti-enclosure movement was conservative and conservationist, rather than politically radical. *[Ed]*

[22] Amidst the turbulence of a Latvia newly-independent of Soviet rule, Ilze Black began to organise events in Riga together with Kaspars Vanags under the label Open. A young generation of artists who emerged from the Soviet past

of people to inquire into the potential of the Net for art and social innovation. It was there that Luksch first encountered many fellow travellers and future collaborators, including Gio d'Angelo, Rachel Baker, Ilze Black[22], Alexei Blinov, Heath Bunting, Pete Gomes, Lisa Haskel, Siraj Izhar, and Kass Schmitt. Everyone learned through doing, and through swapping skills. In a climate of open exchange, programmers, artists, and activists crossed disciplines and forged alliances that would power significant initiatives for at least the next decade.

Backspace was hangout, lab, classroom, production studio, conference venue, and anything else it could be to its users. It would provide web services to interested and interesting parties, for example to artist Franko B and the Torture Garden club. The high speed connection, a rarity in those days, enabled experimentation with live audiovisual content on the Net. Backspace Internet radio participated in the net.audio community of Xchange (founded by Rasa Smite, Raitis Smits and Janis Garancs of Riga-based E-LAB). In 1998, Backspace was the main venue for Art Servers Unlimited (ASU), a conference organised by Luksch and myself. ASU has had lasting significance because it was the first conference to bring together people from all over Europe who were running servers dedicated to the artistic, social, cultural, and political use of the Internet.

BEFORE INDYMEDIA, BEFORE SEATTLE

Backspace also played a significant role in the June 18 Carnival against Capitalism in 1999 (J18). An international day of protest timed to coincide with the 25th G8 Summit in Köln, J18 was the first large international 'anti-globalisation' protest (more accurately described as a protest against neoliberalism)[23]. It was also the first large protest to harness the power of streaming media, which it did with such effectiveness that a global independent media network, Indymedia, sprang up in its wake[24].

In the months leading up to J18, an Internet mailing list had been set up and used to plan media action. The protest started in Australia, and new cities joined in every one or two hours. In London, camcorder-wielding protestors passed tapes to couriers who biked them to Backspace. At Clink Street, Coldcut mixed sound to the footage as the (not-quite-live) webcast proceeded.

While protesters challenged the neoliberals, property developers swarmed around London, taking interest in

leaped straight ahead into artistic practices that would be regarded as avant-garde further West, too. But how could they know that? As the first wave of enthusiasm faded and a feeling of business as normal was setting in, Black moved to London, where she met and, for a period, worked with Luksch.

[23] 'Anti-globalisation' is a problematic term, since the collection of movements that it is typically applied to are at least partially in favour of globalisation (in the sense of lifting restrictions on movement of people); what they are against is the neoliberal project and the undermining of local markets and the ecosystem by transational corporations. Tellingly, the slogan for J18 was 'Our Resistance is as Transnational as Capital.' *[Ed]*

[24] The mainstream media did not anticipate the scale of the protest and had no dedicated crews on the ground. The TV news broadcasts had to resort to using footage from the webcasts to illustrate the story. It is now of course commonplace for the mainstream media to use and even solicit 'amateur' media files. *[Ed]*

Winchester Wharf among other places. Backspace had been under threat for a while, and finally folded in December 1999. James' next idea – DIY network building – mirrored the new desire to put your own place online (versus the past need of finding a place from where to get online). With the launch of Consume, this became a campaigning initiative to bring free (libre), open wireless networking to anyone who wanted it[25].

MARKING DOMAINS, CROSSING BORDERS

For Luksch, the attraction of hybrid media lay in the possibility of bringing the qualities of the Internet out of virtual space, of breaking the frame of the computer monitor. In the late 1990s, the space between old and new media was still uncharted territory. Backspace made possible some of the first tentative forays into this space. In collaboration with Backspace, Luksch streamed video interviews at *Expo Destructo*, Matthew Fuller's 1999 event that brought together activists from direct action movements and net culture. Until streaming became feasible, Luksch had been 'floating between chairs in film festivals and in media art festivals'. But as the space of convergence became populated, so her place within it became more discernible. And with *Virtual Borders*, her first major hybrid media project, she would expose the richness and potential of this space.

FROM CHIANG MAI TO HACKNEY (AND BACK AGAIN)

In the early 1990s, while studying at Chiang Mai and Chulalongkorn (Bangkok) Universities in Thailand, Luksch had come to know the Hani-Akha people, one of several mountain peoples living in the borderlands of the Mekong Quadrangle[26]. The initial idea for an extended documentary about the Akha occurred to her in 1994, when she assisted a media workshop at MPCD-SEAMP, a Chiang Mai-based NGO headed by Dr. Leo Alting von Geusau[27]. A response to forcible dispossessions by logging companies, the workshop trained indigenous peoples to use video cameras for mapping their terrain to support their claims to the land.

In 1999, Dr. Alting von Geusau alerted Luksch to a forthcoming conference on Hani-Akha culture, to be held in China. The Akha share a common oral culture, but their dissimilar statuses in the different nation states they inhabit, and the divergent influences of the majority languages therein, are changing it rapidly, for better and for worse. The conference was intended to be a forum for celebrating common heritage, discussing concerns about changes, and proposing strategies for uniting the Akha across borders.

[25] See my text 'On Free Wavelengths' in this volume.

[26] An area stretching over the borders of Thailand, Burma, Laos, Vietnam and China; infamous for opium growing and smuggling, but also for some of the worst excesses of American high-tech warfare. *[Ed]*

[27] Sadly, Dr. Alting von Geusau (1925–2002) did not live to see Luksch complete the project. *[Ed]*

[28] In 1997, Luksch had been to Laos with Dr. Alting von Geusau, carrying a script for a film called *Secret Recipes, Secret Wars*. During the Second Indochina War (late 1950s–1975), Laos became the most heavily bombed place on the planet, despite having never been subject to a declaration of war. The Akha in Laos supported neither the communists nor capitalists; nevertheless, the war carried on over their heads. The US used Laos as a wartime proving ground: Agent Orange, napalm and high explosives rained down on the forests. In the film, wartime recollections of elderly Akha were to be intercut with revelations about the culinary culture. Sadly, the project had to be abandoned when the team fell seriously ill. *[Ed]*

Luksch returned to the region with a small crew (Dara Khera and Tarik Thami)[28]. The context of the conference, and her experience with streaming at Backspace, suggested a form for the project, and a title: *Virtual Borders*. The team followed an Akha elder from his village near Chiang Mai to the conference in Jinghong. At the conference, they recorded the speakers and interviewed many participants, then streamed audio files back to Thailand. In Chiang Mai, the Mountain Peoples' Radio Station (originally a wartime broadcaster of US propaganda) relayed the streamed conference proceedings and interviews by AM radio to surrounding Akha villages. This broadcast gave the Thai Akha an opportunity to hear a debate involving Akha from other nation states. The team also helped the community build the first Akha language website.

A FILM ALWAYS HAS AN END, WHILE REALITY CONTINUES

The major manifestation of *Virtual Borders* was to have been a database-driven film[29]. The beginning would be a traditional authored documentary, introducing issues and themes while following the protagonist to the conference. At this point, the film would branch into a nonlinear section – hypermedia. Viewers would navigate thematically through footage from conference events, speeches and interviews. There would be numerous clips, totalling several hours, arranged according to themes such as 'religion', 'language', 'song', and 'citizenship'. These cross-linked branches would then converge into a common, authored concluding portion[30]. The final frame of this section would be identical with the homepage of the Akha website, and so the film would continue online. A hyperfilm is an ambitious undertaking, in this case even more so given that there was virtually zero external funding. Basic equipment, travel costs, shooting expenses – all were provided by in-kind support of the producers, or paid for from Luksch's (rather limited) personal funds. Throughout the production, the project was dependent on goodwill and borrowed equipment and expertise.

In 2000, Luksch presented the concept at the Amsterdam Documentary Film Festival that year, speaking at the first-ever panel on documentary and the Internet (Docs Online), and generating a huge amount of interest. However, the project dealt with a minority topic, and so was not attractive to many funders. The translation of hours of material from Akha language posed an additional burden. Determined to complete the project, but unable to commence on the database model without external support, Luksch decided to simplify the film and make a linear edit[31].

[29] The project was intended for close viewing by individuals or small groups. For mass viewing in a cinema, an alternative approach would have to be developed – for example, at any particular screening, the navigation could be preprogrammed, or conducted randomly, or chosen in some way by the audience. But the first two approaches compromise the hypermedia, while the third presents technical challenges and is also perhaps more appropriate for a thriller or action movie. *[Ed]*

[30] The DVD Video specification supports random access to clips arranged in a cross-linked branching structure. *[Ed]*

[31] Even this was no mean undertaking – the film, eventually cut to 90 minutes, features dialogue in five languages (Akha, Thai, Chinese, Burmese, and English), subtitles in English, French, Italian, Japanese, Slovak, and Thai, and voiceovers in Akha and Hindi. The DVD of the film carries all these alternate languages, and the Akha-dubbed version also exists as a VCD (video CD) for ease of distribution in mountain villages. *[Ed]*

Taken as a documentary film alone, the work is extraordinary – a polyglot anthropological road movie that navigates by jungle paths and satellite links, it is committed to the Real in a unique manner. *Virtual Borders* does not attempt to disinterestedly present a reality, nor does it pose the problem of reality. It is instead a document of engagement, where the international film crew train and collaborate with the Akha to enable them to exploit the new reality of digital networks as producers. What results is something like an ethno-anthropology, more self-documentation (by the Akha, by the crew) than other-observation.

Despite the abandonment of the database film, in 2004 V*irtual Borders* did finally achieve a deeply reflexive hypermedia quality when Luksch returned to the Akha village where the story began and presented the film on a network of TV sets arranged around the village square. Grasping the larger project – its hybrid and interdisciplinary quality (involving establishing communication links, training people in their use and documenting the process); its breaking of the fourth wall (not into the theatre, but into cyberspace), and of the ceiling too; and its existence as a social interstice (in Nicolas Bourriaud's sense) – is key to understanding the evolution of ambientTV.NET.

EMERGENCE OF A TOOLBOX

It was in this environment of new social and technical networks, streaming media, and hyperfilms that ambientTV.NET emerged. Designed to be a toolbox, the new formation comprised an Internet domain, a physical space, and a company. A domain was needed to host *Virtual Borders* and future hybrid media projects. The name chosen connotes that which envelops us all (particularly, information systems); using the obligatory punctuation of the 'dot', it couples television ('remote seeing') to the 'NET', the demiurge that makes everything possible.

Although the Net had led to a revaluation of physical space, the complexity of *Virtual Borders* necessitated a permanent workplace. Documentary distribution company Mondial, which had been founded by Alan Fountain and Sylvia Stevens as an online platform for filmmakers and an alternative to network TV, offered Luksch a giant desk in a warehouse in Shacklewell Lane, East London. Other occupants included documentary makers Faction Films and Keith Shiri of Africa at the Pictures. Thus, ambientTV.NET found a home in the East End.

The third item in the toolbox, the limited company Ambient Information Systems (AIS), enabled the raising of funds and the proper management of risks and contracts with other bodies. In the romantic spirit of the autonomy of art, running a limited company as an artist might seem like a Faustian pact. However, for ambientTV.NET, the company structure of AIS acts as a buffer, allowing the artistic activity to float freely above the material base. Clearly distanced from the overwhelming drive towards commercialisation associated with the 'creative industries', ambientTV.NET's projects are not determined by the legal structure that carries them. While not officially a non-profit venture (as of 2008), profit maximisation is not an operating principle of AIS – rather the opposite may be inferred from ambientTV.NET's allegiance to a philosophical perfectionism.

The ideas shared and bonds forged at Backspace survived the displacement to East London to inform early projects such as *Telejam* and *ambient.wireless*. But the constellation that ambientTV.NET developed into ventured much further into the distant reaches of mediaspace to forge a distinctive, if rather variegated and complex, identity.

Taken for a Ride: The New Economy

ambientTV.NET emerged just as the 'dot-com bubble' that began in the late 1990s peaked; by mid-March 2000, the NASDAQ Composite Index was on its way down as the gross overvaluation of companies in the Internet sector became apparent. In retrospect, the dot-com bubble bears some of the hallmarks of the classical boom-bust cycle identified by Marx, and there are significant parallels with earlier technology booms, such as the 1920s boom driven by electricity, radio, aviation and the automobile. On the other hand, the bubble's unprecedented scale and vertiginous rise were made possible by the 'acceleration of just about everything' that pedal-to-the-metal technological progress had delivered through digital networking.

The first signal that a major bubble was building was the Netscape IPO (initial public offering) in 1995. The company, which then led the browser market, gave away its best product for free, while earning hardly any revenue – yet the market valued it at US$2 billion. Soon afterwards, it became obvious that the relatively youthful World Wide Web could be more than just a tool for ancillary publishing and communication. It was the dawn of e-commerce. Low interest rates, the novelty of

the dot-com, an openness to idiosyncratic business models, predictions of astonishing growth, unbounded optimism – all fed the bubble.

Excess ruled, most dramatically in the networking hardware sector. The need for more bandwidth was indisputable. New satellites were launched and new undersea cables laid. Cities were dug up repeatedly and thick bundles of optical fibre placed next to mains water lines and gas pipes. These hugely cash-intensive investments triggered waves of mergers and acquisitions. New players, notably WorldCom, arrived on the scene to buy up older rivals, growing phenomenally quickly as a result. The expansion in data carrying capacity was by no means instantaneous, however; nor was it evenly distributed. The gigabits of new bandwidth reached only businesses for quite some time. The home truth in 1999 was that most domestic connections still relied on dial-up modems with real-world speeds of a few kilobits per second. While London's City got wired up, the consumer paid a fortune for anything more than narrowband.

The predicted consumer bonanza on the Net did not gain the expected momentum. With numerous dot-coms competing on the basis of business plans that relied on the monopolisation of a market sector through network effects, there could only ever be a few winners. The gap between expectations and reality, between the promise of unlimited connectivity and the materiality of scarce bandwidth was too large. The market collapse began in late 1999, and continued through 2000. By 2001, a majority of the dot-coms had ceased trading, ancillary industries such as advertising and shipping had made cuts, and technology experts had been laid off.

Many of the new bandwidth empires vanished into the ether, leaving behind a trail of fraudulent accounts. After conducting the largest-ever US merger (with MCI in 1997), WorldCom was caught in an $11 billion accounting scandal, and in July 2002 it filed the largest corporate bankruptcy in US history, laying off over 15,000 workers[32]. The demand for bandwidth never materialized, and some industry analysts claim that it will be decades before significant amounts of the fibre under the pavements is 'lit up'.

Ironically, if only a fraction of the bandwidth created had been deployed with greater equity, the 'digital divide' would be a far less significant issue today. Through the dot-com

[32] A year later the reformed company would be awarded a US Department of Defense contract to build a cellphone network in Iraq, while payments withheld from former employees remained outstanding. *[Ed]*

years, the idea of the Internet was radically perverted – the original vision of peer-to-peer symmetric networking has given way to an increasingly hierarchical structure encumbered with access restrictions, speed limits to manufacture scarcity, and a systemic bias in favour of downloading for consumption and against uploading[33]. The smallest Internet Service Providers (ISPs) are burdened with absurd demands to log data in compliance with 'anti-terror' legislation, while at the same time governments fail to shield them from the anticompetitive practices that keep access costs inflated. It should therefore come as no surprise that the Net – the subject and medium for a growing number of artists from the mid-1990s – became the focus of several highly critical, reflexive works, a prime example of which is ambientTV.NET's *Broadbandit Highway* (2001–06).

MILLENNIAL MEDIA ARTS: THE PRECARIOUS YEARS

Almost exactly a year after the dot-com bubble burst, ambientTV.NET premiered *Broadbandit Highway* at the *Please Disturb Me* show in the recently refurbished Great Eastern Hotel in London. The hotel offered exhibition space, intending the rooms and lobby; characteristically, Luksch, working with Ilze Black, chose instead to use one of the hotel's TV channels.

Broadbandit Highway probed the extent of online surveillance systems, proposed a paradigm of banditry on the information superhighway[34], and anticipated the Net's assimilation by the 'cathode ray nipple' of TV[35]. Images from 100 traffic webcams around the world were hijacked and diverted onto the hotel TV channel to make a continuous, live road movie. A genuinely ambient piece of television, without conventional dramaturgy, *Broadbandit Highway* extended the private space of the hotel bedroom, allowing a 'return of the real' through the opening of a hundred live-view windows onto the world. The ongoing road movie ended five years later, when the last hijacked camera went offline.

The conceptual and critical content of *Broadbandit Highway*, refracted through the anodyne delivery medium of TV, was packaged as a sugar-coated time-release capsule of discomposure. The superficially benign nature of the piece was reinforced at the opening of *Please Disturb Me*, when Supermodem (Kate Rich and Sneha Solanki) performed a live electronic soundtrack punctuated by reassuring BART[36] train announcements and bingo calls. Meanwhile, the broadbandits (Luksch and Black) held up the lobby with their powder-blue stetsons, fur jackets, and cowgirl boots. It was in this

[33] Most home – or 'consumer' – Internet connections are asymmetric, with much greater bandwidth allocated for downloading, and lack static IP addresses that are necessary to run a server to the Net.

[34] A term often attributed to Al Gore; the non-arrival of which had rendered it a joke by the mid-1990s *[Ed]*

[35] '[A] lot of people [...] think, "oh, tv means a sitcom, tv means an hour long drama, tv means the evening news". If the web is becoming like tv it is not becoming like that kind of tv. It´s becoming like the CCTV, or the Home Shopping channel or *Cops* or something like that.' Gary Wolf of *Wired Digital* interviewed by the author: 'Ambient Media or the Social Spaces of the Future'. Available at: www.heise.de/tp/r4/artikel/3/3107/1.html 'Cathode ray nipple' is a phrase from 'Television, the drug of the nation' by The Disposable Heroes of Hiphoprisy.

[36] Bay Area Rapid Transit, the metro rail system of the San Francisco Bay.

performance that the metaphorical structure of *Broadbandit Highway* was fully revealed – for the technologies that surround us do appear to be mostly harmless, often enticing, even downright seductive. As it becomes slowly incorporated by the viewer, however, the work broadcasts a haunting call to alertness and reflection.

Broadbandit Highway highlighted themes and established trajectories that would be prominent in later projects. Issues of widespread surveillance, the obsolescence of the classical liberal concept of privacy, and the vulnerability of data would be radically unveiled in *Faceless* (2007). Works including *Telejam*, *AV Dinners* and *Myriorama* would deploy approaches that featured at least some of: the conscious mapping of the medium and the space of work, site-specificity, the precedence of process and performance over object, breaking of the frame, and understated critique (sometimes hidden behind scintillating manifestation).

THE CYBERPRECARIAT

Despite millennial dreams of a 'creative class', times were tough for many artists. Luksch only just managed to find a studio space through Mondial, and although technically a company owner, she and her friends were financially much closer to the precariat. 'Precarity' has become one of the key-words of a certain leftist discourse on the development of contemporary capitalism. Used narrowly, the notion refers to new labour arrangements increasingly adopted by big business and government, including reduced unionisation, exposure to hire-and-fire practices, and general depoliticisation. Whilst giving some workers a sense of freedom and operational independence, such flexible labour organisation[37] does not remedy the power imbalance within capitalism, and conditions for most workers worsen. More broadly, 'precarity' encompasses the increasing precariousness of citizenship and communication rights (brought about by state encroachment on civil liberties, and media conglomeration, respectively). While first applied to phenomena in wealthier economies, precarity describes best the situation of billions across Asia, Africa, and Latin America.[38]

It is sometimes claimed that, by choosing flexible working arrangements outside the traditional labour market, artists, designers, technology developers and other members of the creative class become (perhaps unwillingly) the vanguard of a new type of labour organisation. Occasionally, the digital artisans who produce 'cool stuff' for corporate clients are

[37] 'Flexibility was an extremely positive idea in California in the 1970s when the culture of microelectronics was invented. It was the polar opposite of the rigid 1950s [...] These were the utopian days of Bucky Fuller, Gregory Bateson and the *Whole Earth Catalog*: no-one would have dreamt that *An Ecology of Mind* could become a management tool. But the looser, more creative lifestyle did not just mean the emergence of a whole new range of products, useful for stimulating consumption. In California, and ultimately in much of the developed world, the new culture seemed to promise a way out of the social conflicts that had stalled the Fordist industrial regimes.' Brian Holmes 'Unleashing the Collective Phantoms: Flexible Personality, Networked Resistance', *Mute* magazine, 2002. www.cceba.org.ar/evento/taller007.pl

[38] '[T]he precarization of existence is reflected in the permanent instability of the most essential aspects of living that alter, in a profound manner, the very notion of a project of life, above all for young people. [...] Re-inventing the notion of living is a job that is directly connected with

blamed for the losses of the '68 generation and capitalism's ability to co-opt opposition:
[...T]o describe the immaterial labourer, 'prosumer', or networker as a flexible personality *is to describe a new form of alienation, not alienation from the vital energy and roving desire that were exalted in the 1960s, but instead, alienation from political society, which in the democratic sense is not a profitable affair and cannot be endlessly recycled into the production of images and emotions. The configuration of the flexible personality is a new form of social control, in which culture has an important part to play. It is a distorted form of the artistic revolt against authoritarianism and standardisation: a set of practices and techniques for 'constituting, defining, organizing and instrumentalizing' the revolutionary energies which emerged in the Western societies in the 1960s, and which for a time seemed capable of transforming social relations.*[39]

Indeed, 1990s London allowed many of these digital artisans to capitalise on the Net hype, and some 'flexibly' moved between commercial projects and their own artwork. However, others were more uncompromising and did not allow themselves to be co-opted into 'flexible' forms of control; they found themselves in the classically precarious situation of the artist. In both cases, the scarcity of skills and equipment encouraged collectivisation. Groups such as Audiorom, AntiRom, Soda and Lateral balanced artistic excellence, creative independence, and commercial allure, often cultivating corporate clients with great success. Collectives of the second type, including ambientTV.NET, were less formal groupings of individuals with (usually) convergent artistic and political goals, that typically came together around an 'arts server'[40]. Many of these collectives were attempting to mirror the new network architecture in the social realm. Holmes' critique essentially only applies to groups of the first type.

Open Source Culture: Hackers, DIY, Free Media, Art and Networks

DIY MEDIA: COMING UP AGAINST THE CRASH

The bursting of the New Economy bubble in 2000 coincided with the rise of the 'dot-org boom'[41], as participatory movements and free media hacktivists[42] emerged into the mainstream. Consume (James Steven's post-Backspace project) proposed a non-commercial model for wireless community networking, wikis

the work of reinventing spaces for collective organization that would allow us to realize these projects.' – from Martín Bergel & Julia Risler's defining text for the conference Precarity, Social Movements and Political Communication, CCEBA, Buenos Aires, May 2006. Translation: Brian Whitener *[Ed]*

[39] Brian Holmes *Hieroglyphs of the Future* (Zagreb: Arkzin/WHW, 2003)

[40] Art Servers Unlimited (ASU) (Backspace/ICA, 1998) highlighted this development and reflected on better collaboration and resource sharing. In his keynote speech at the conference, Janos Sugar borrowed Joseph Beuys' terminology to describe ASU as 'global social sculpture'. http://asu.sil.at

[41] 'dot-org boom' (parallel to dot-com but in the heart of the alt.net) is a term coined by Juha Huuskonen.

[42] hacktivist = hacker + activist. The mainstream media use 'hacker' to mean 'cyber-criminal', where instead they should use 'cracker'. A hacker develops or modifies hardware or software in the interests of efficiency, aesthetics, or security. *[Ed]*

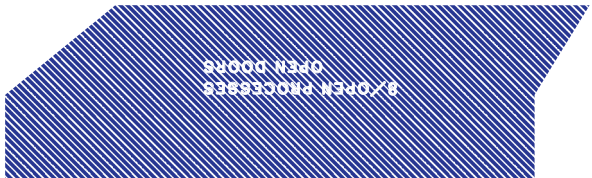
and weblogs began to garner huge audiences of reader-writers, and the Creative Commons initiative developed copyright licences consonant with digital creation and distribution. Such initiatives championed the user as both producer and consumer. For those who had observed Net culture in the 1990s, however, little was new. Alternative or 'copyleft' models of dealing with intellectual property, such as GNU GPL, predated Creative Commons by years, and artists and hacktivists had been running Internet radio and TV stations in the 1990s. Importantly, the early history of the Internet – setting aside the military imperatives – was one of an academic culture of free exchange and discussion and freewheeling technologists (the hackers), against the backdrop of the Civil Rights movement, anti-Vietnam protests, and grassroots media initiatives. The grassroots initiatives persisted even as political unrest was put down, but the DIY culture of the Net only gathered critical mass at the turn of the millennium.

What is sold now as Web 2.0 or social software was prepared in the labs of free and open source software developers and net culture practitioners in the 1990s. At the core of these developments is a paradigm shift from a culture of consumption to a culture of co-production – Lawrence Lessig speaks of a read-and-write culture as opposed to a read-only culture. The new paradigm may also be described as 'open source culture', to highlight its origins in the early hacker culture of the Net.

OPEN SOURCE CULTURE

What I term open source culture is based on the ethics of the first and second generations of computer hackers. Hackers of the first generation developed the Unix operating system and wrote the software for the early Internet. Against hierarchical styles of management and the subordination of their art to Taylorist organisation, they put technical descriptions of the Net in the public domain. The Internet is still based on these open standards, which means that anybody who has the skills to read those documents and write software can innovate. Early hacker communities also realized the first public online community in Berkeley, and designed the machines that would eventually develop into the 'home' or personal computer.

Later, as liberty and innovation were threatened by the growth of proprietary systems from corporations such as Microsoft, Apple and AT&T, a second generation of hackers created free space by releasing an easily-licensable version of Unix, BSD (Berkeley Software Distribution) in the late 1970s.



BSD was the first distribution of Unix to include code that supported the Internet Protocol; it also contained UUCP, a technology which enabled remote computers to connect and exchange documents. UUCP was used by academic hackers to create newsgroups – electronic message boards for remote communication. Then in 1983, Richard Stallman founded the GNU[43] Project, whose goal was to establish an operating system entirely free of proprietary code. Stallman later wrote the GPL (General Public Licence) for software, which popularised copyleft – the use of copyright law to allow unrestricted modification and distribution, while preserving a similar right for other users. When the young hacker Linus Torvalds created Linux, his version of Unix kernel, he used the GPL to protect it.

[43] GNU = GNU's Not Unix. GNU GPL was a revision of Emacs GPL. *[Ed]*

In summary, open source culture nurtured the development of operating systems, the Internet, and tools for creative expansion, including licences that encouraged the development of software in the public domain. Later, the idea of copyleft was picked up by lawyers who created the Creative Commons licences, which extend the principle from software to other forms of expression, including music, text, still image and video. In the fertile 1990s, hackers, activists, and digital artists met at new type of hybrid institution then emerging. Exemplified by London's Backspace, Amsterdam's desk.nl, New York's The Thing, Lubljana's Ljudmila, and Vienna's Public Netbase, these sites began as informal, self-organising networks of collaboration, and grew to offer shared resources and the possibility of project development, eventually forming the backbone of an open lab culture that popularised and helped shape digital and social innovation. Such labs maintained their independence through a range of survival strategies including the cultivation of non-monetarian, or 'gift', economies. Through contact with artists and activists, hacking gained a broader social base; by the turn of the millennium, open source culture was fast approaching the mainstream.

CASSANDRA CALLS FROM THE DIGITAL UNDERGROUND

For decades, hacker groups such as the Chaos Computer Club (CCC) and *2600* magazine have sounded warnings about the creation of the 'glass citizen' – the individual exposed in electronic space, fully transparent to governmentality and corporate control. The massive growth of networked digital systems has increased the volume and precision of data held about people. Despite data protection laws, firewalls between different databases have been shown to be increasingly porous. Under the aegis of the 'war on terror',

states have granted themselves ever-greater rights to gather information on individuals and sift through databases in search of 'suspicious' correlations (which might have no associated causality). Liberal democracies (and the UK and US in particular) are tending towards mass surveillance states.

The growing pool of data legally held by financial, medical, and social security institutions is being augmented with records of individuals' shopping habits (store loyalty cards), communications (cellphone, email) and movements (by car, public transport or foot). Datamining techniques enable niche marketing (the targeting of individual consumers) and the invidious (and often invisible) practice of social sorting. Increasingly, biometric data (fingerprints and retinal scans) and genetic data are being collected, and surveillance is becoming automated. The recording of some of this data is now demanded by the state under questionable laws – in the UK, DNA records obtained at arrest are retained by the police even if no charges are brought – or even illegally – as in the US National Security Agency's post-9/11 domestic wiretaps.

According to philosopher Paul Virilio, we are creating a 'mechanized imaginary'[44], a mental world which is no longer human and which exists in something like a parallel universe. But this parallel world begins to exercise real power over the world in which we live. Digital access codes increasingly affect the ability to move through this world, to take the Tube or cross a border, or to obtain a service from a corporation or the state. What used to be citizen rights have become subsumed under a new regime of access management in a world full of digital borders. We have surpassed the surveillance society imagined in George Orwell's *1984* and are approaching a 'society of control'[45].

In its infancy, hacking was about freedom of movement within electronic networks. As this freedom became available through the opening of the Internet, those who had been hackers became something closer to information environmentalists. Hackers were the first to experience encroachments on rights and freedoms in the digital sphere, and highlighted key issues of surveillance and privacy, intellectual property and copyright, and freedom of speech. As artists, lawyers and academics joined in the battles, and new media labs bloomed, open source culture started to gain wider recognition. Today, once-classic hacker concerns have become issues that affect and interest everyone.

[44] 'Today it is impossible to talk about the development of the audiovisual without talking also about the development of virtual imagery and its influence on human behaviour, or without pointing to the new industrialisation of vision, to the growth of a veritable market in synthetic perception and all the ethical questions it entails. [...] Once we are definitely removed from the realm of direct or indirect observation of synthetic images created by the machine for the machine, instrumental virtual images will be for us what the foreigner's mental pictures already present: an enigma. Having no graphic or videographic outputs, the automatic perception-prothesis will function like a mechanized imaginary from which, this time, we would be totally excluded.'
Paul Virilio *The Vision Machine* (London: BFI, 1994), pp. 59–60

[45] Gilles Deleuze 'Postscript on the Societies of Control' in *October* 59, Winter 1992 (Cambridge: MIT Press)

Coalescence in the crucible

INTERDISCIPLINARY EXPLORATIONS

Mukul Patel had lived in London since 1993, but rode out the dot-com crash in Berkeley, during a spell at the University of California. He returned from the Bay Area to take refuge in an Arcadian Victorian schoolhouse off Brick Lane, home to a remarkable population of tree frogs, desert plants, dozens of tortoises, and old-school artists David Spurring and John Ashworth. One decisive night, old friend Shane Solanki invited him to DJ at the after party for the *Please Disturb Me* show. Hosted by Luksch and Black, the party cascaded down three storeys of a canalside house in Hackney while films by Shu Lea Cheang and the Chapman Brothers played on the walls, enigmatic and darkly enticing. But it was the screening of *Broadbandit Highway* that captured Patel's attention.

Over the previous decade, Patel had found himself repeatedly moving between disciplines – having studied Natural Sciences and Social & Political Sciences at King's College, Cambridge, his subsequent life in London involved being editor and writer by day, sonic explorer by night. Within music, he was drawn to the immense variety that the city offered in the early 1990s – from the Institute of Dubology to the Institute of Goa and the free/squat party scene, from Charles Hayward and Tenko at Conway Hall to the Gundecha Brothers at the Kufa Gallery[46]. These explorations brought him into unique spaces and scenes, including CoolTan Arts in Brixton and the Exploding Cinema.

Through the 1990s, Patel honed the DJ craft first exercised in the Cellars of King's College, using the mixing desk to bridge disparate forms, cultures and times. But it was not until he encountered Talvin Singh and Sweety Kapoor's *Anokha*[47] night in 1996 (then at the Blue Note, Hoxton) that he found a channel for his approach to 'music production-reproduction'[48]. The club ran on Mondays nights, for those listeners dedicated enough to sacrifice some mid-week sleep. It was a microcosm of sound: one memorable night, Patel served breakbeats to punctuate an impromptu vocal duet between Björk and the Indian ghazal singer Hariharan, with the frenetic Squarepusher on bass. Every week, there seemed to be an irruption in the musical world, the faultline spreading out from Hoxton Square.

After the closure of the Blue Note in 1997 – a victim of the suicidal ShoHo effect – *Anokha* moved to a number of larger venues. What Patel regarded as a curatorial role behind

[46] The Institute of Dubology (at the Vox, Brixton) showcased reggae, dub, and poetry from artists including Linton Kwesi Johnson, Benjamin Zephaniah and African Headcharge. The Institute of Goa was an uncompromisingly hardcore, ostensibly acid-techno night, where nevertheless tracks by Pink Floyd, Hector Zazou or Fun-Da-Mental would be woven in the mix by innovative DJs (Quark, Whirling Dervish). Drummer Charles Hayward was part of the seminal art-improv band This Heat, which also featured the late Gareth Williams. The Gundecha Brothers are Indian singers of the ancient Dhrupad form. *[Ed]*

[47] See http://ethnotechno.com/_content/ints/int_mukul_5.20.06.php

[48] In the 1920s, Laszlo Moholy-Nagy characterised the phonograph as having 'productive-reproductive potentialities'. *[Ed]*

the decks spilled over as he began to programme the 'ambient' room in *Anokha*, and also the Sunday afternoon deep / slow / quiet listening offshoot in Brick Lane, *Calcutta Cyber Café*. There, he brought in artists ranging from sample wrangler Matthew Herbert and the late, prolific Muslimgauze[49] to electroacoustic minimalists zoviet*france, and classical Indian sarode player Sohan Nilkanth. By 1999, however, the combination of a stagnating electronic music scene and a burgeoning commercial culture had severely narrowed the scope of the club as forum, and Patel began to explore other avenues – most fruitfully, through collaborations with choreographers of contemporary dance.

The academic sojourn in Berkeley (2000–01) gave Patel the space from which to reconsider his trajectory. Serendipitously, Steve Reich was then a visiting lecturer at the Department of Music and discussed and performed several of his seminal works. Patel also encountered the Max/MSP programming environment at CNMAT (the Centre for New Music and Audio Technologies), and attended classes at the Ali Akbar College of Music in Marin County, which reinforced his passion for North Indian art music.

At Berkeley, Reich pointed Patel towards Alvin Lucier, in whose approach he found resonances with the work of Oulipo[50]. This redoubled an association between processes in literature and music across cultures, first triggered by a lecture by Pandit Rajeev Taranath entitled 'The State of the Art'[51]. Taranath, a leading sarode player and disciple of Ustad Ali Akbar Khan, had elaborated a concept of creativity within rule bound forms (specifically with reference to Indian art music) by drawing on Eliot and Russian formalist Victor Shklovsky[52].

For Patel, the decade up to 2001 had been a time of voracious input; the spell at Berkeley triggered a synthesis and the beginning of a period of practice. In late 2000, he compiled an audio sketchbook, *If on a winter's night a traveller*, a diversely-textured, filmic collage that brought together the material that had influenced him over the previous decade. This was to serve as a guide for composition – a reminder of possible modes of organisation of sound and word. But it was not until his participation with Luksch in the *acoustic.space.lab* symposium (at Ventspils International Radio Astronomy Centre in Latvia)[53] that Patel encountered a setting in which he could develop his practice equally unencumbered by disciplinary boundaries and commercial imperative.

[49] Herbert is significant for his manifesto-driven, politically-charged musique concrète, produced under aliases including Dr. Rockit. Muslimgauze (Bryn Jones, 1961–99) released over 100 albums that brooded over the plight of Palestine. *[Ed]*

[50] Ouvroir de littérature potentielle ('workshop of potential literature'), a group of writers intrigued by maths and mathematicians intrigued by literature. Founded in 1960, members include Raymond Queneau, Marcel Duchamp, Georges Perec and Italo Calvino. *[Ed]*

[51] 'Defamiliarisation, defacilitation, retardation [...Push] the raga to the edge where, if you are less than expert, it ceases to be that raga. Push it till the familiar becomes unfamiliar, then bring it back to an enriched type of familiarity, to a re-cognition of the raga.' – Rajeev Taranath at the School of Architecture, Ahmedabad, India, 1990.

[52] In Indian art music and in Reich's 'music as a gradual process', authority is shared among composer, performer and listener. *[Ed]*

[53] Irbene and Riga, August 2001.

A NEST FOR NETWORKING

In 2001, ambientTV.NET moved to a new home on the seventh (top) floor of an industrial building in South Hackney, where they established ambient.space as a studio/workshop/salon. Originally occupied by sweatshops, a few artists had established studios in the building in the late 1990s. By 2007, there were four galleries, and the majority of the occupants were engaged with either the creative industries or art.

ambient.space was ideally located for exploring the possibilities for building wireless network infrastructures[54]. The expansive view from the southern aspect of the building included the antenna mast of free2air, the open wireless access point run by Vortex in Hackney Road. Over the winter of 2001–02, ambient.space hosted a series of free networking workshops involving free2air, consume.net, *Mute* magazine's *YouAreHere* initiative and various free floating networking wizards. Obsolete computers donated by the London School of Economics, Reuters, the National AIDS Trust and others were reconfigured as routers. Antenna designs were tested and manufactured. Within a few weeks, the free network community had established ambient.space as a significant node in the growing East End Net. Many studios in the building were networked via ambient.space, and free2air provided the pipe to the Internet. In this early missionary phase of free networks in London, people were encouraged to join the community not only to get cheap or free broadband, but primarily to share: share responsibility of managing the network, share equipment, share content, share space, share the kitchen, share minds.

[54] See my text 'On Free Wavelengths' in this volume.

The early days were an intense time of networking, both in technical and social terms. There was a constant flow of people through the doors of ambient.space – to borrow cables, exchange software patches, have a cup of tea. A fortuitous conversation might extend into dinner and beyond; guests would find themselves ensconced in cushions and tapestries on the large central podium, enveloped in sound from numerous loudspeakers. Then at sunrise: stretching out in the morning sun, flying carpets over racing clouds, only to wake fully to the slam of the heavy door as the day's first visitors arrive. (The open-door policy, unusual for London, led one *Time Out* journalist to think that the space must also serve as a 'community centre'.)

At the *Calcutta Cyber Café* in 1997, Patel had invited artists and audience to kick off their shoes and recline on giant carpets.

There the tone was set by Newcastle electroacoustic duo zoviet*france, who elaborated a single pluck on a lap steel guitar into a 40 minute performance. Five years later, ambient.space provided an even more accommodating environment, and it continues to do so. The central podium can be configured as observation deck, stage, sofa, or bed as required. It has even been incorporated into an instrument, acting as one bridge of Rolf Gehlhaar's SOUND=SPACE, an ultrasonic/laser musical system that extends invisible keyboards up to the ceiling. More commonly, it serves as seating or reclining area for participants or audience.

But there can be no music without food, and the kitchen at ambient.space conjures up exceptional platters to challenge the sonic feasts. The arrival of one-time sushi chef Mariko Montpetit as resident raised the bar impossibly high – never had hacktivists been so well fed. This gastronomic seduction was complemented and complicated by bespoke cocktails developed by Vitamin AA (Anthony Auerbach). ambient.space continues to host informal, often impromptu concerts, screenings, meetings, and performances. Ambient in its fullest sense, it is an environment to facilitate artistic and intellectual exchange and stimulate the senses. The creation of such a space is an artwork in its own right, though at the time Luksch, Black, Patel, Montpetit and their collaborators did not see it as that. They just did it, rather intuitively.

Net art after the Net

Recognizing its social situatedness is at least as important for understanding ambientTV.NET's work as appreciating formal aspects. Since some of the work interrogates new communication technologies, it would seem to require positioning in relation to Net- and media art. But these categories are contentious[55] – indeed, this very categorisation is now regarded by many practitioners as leading to a ghettoisation. I will instead try to implicitly characterise the type of art ambientTV.NET creates by discussing some key features, and pointing to some artistic 'neighbours' and related practices.

In the early stages of Net art, the Internet, or more precisely the Web, was the subject of inquiry, and most works were self-referential, in and about the medium. Some of the most well recognized proponents of this movement publicly 'retired' in 1999. Since then, there has been a second phase of what

[55] 'New media art' is a thoroughly problematic term – ahistorical and suggestive of a naïve romance with technology. Laszlo Moholy-Nagy was a far more thoroughgoing 'new media artist' than the majority of those so-called today (consider his claim to have made paintings over the telephone in 1922). 'Media art' is a potentially richer category – free from the imperative to be new, divorced from the darling of the creative industries, and usually directed in a critical interrogation of 'the media'. *[Ed]*

I call Net art 'after the Net' (a phrase borrowed from *Mute* magazine's new slogan[56]), which continues to use the Net as a medium, but is less hermetic in its content. (The demarcation lines are not always as clear as the language suggests.)

After participating in the early phase of Net art, Luksch began to break the frame of the computer monitor (and the cinema screen) through the early ambientTV.NET projects. What has since emerged is a distinctive, coherent and critically committed body of work that stretches across genres and media. Works are bound by a common concept of 'cross-reality' – a reality crossed through by proliferating devices of mediation, but reality nonetheless: there is no dissolution into a virtual heaven. Digital networks and more tangible spaces are combined in complex and nuanced ways: by facilitating independent media infrastructure and platforms (in *ambient.wireless and Virtual Borders*), by using virtual space to extend and bridge carnal performance (*AV Dinners*), by critiquing networked systems of surveillance through dance (*Myriorama*), by hacking the control systems of corporate-governmentality (*Faceless*), or by creating a physical hub to accommodate and connect visiting artists (ambient.space).

The concern for the real is encapsulated in the 'ambient' of ambientTV.NET, which indicates a consideration of the material and informational economies that surround us. This consideration prompts critical questioning in reflective cycles. The need for reflexivity emerges from a recognition that everyday life is increasingly influenced and to some degree determined by social-technological systems[57] – a recognition accelerated, in the case of ambientTV.NET, through the use of digital networks. Reflexivity is further honed through the struggle to remain independent, which ambientTV.NET has pursued by cultivating manifold skills, relationships, networks, spaces, and gift (non-monetarian) economies.

Together with its peers (discussed below), ambientTV.NET has passed through the digital looking class to emerge on the other side of the mirror. Rather than fetishising technologies, Net art after the Net interrogates their relationship with society, and sometimes throws a bit of sand into the machine.

CREATIVE RESISTANCE

The best exemplar of such critical work in ambientTV.NET's oeuvre is the project *Faceless*, which uses the law to obtain CCTV surveillance camera recordings that are then edited into

[56] 'Culture and Politics after the Net'. In the mid 1990s, Net artists had come into being, for the most part rejecting gallery and museum (who hadn't heard of the artists, and whom the artists didn't need – or want). 'You can be a Museum, or you can be Modern, but you can't be both', said Gertrude Stein. Rejecting museums meant rejecting their framing function, seen as elitist and conservative (it also entailed a rejection of Duchamp). While the cyberpunk roots of Net art were growing out in the late 1990s, the format of the high-tech media installation continued to be fashionably collectable. Process-based Net art appeared strange and intangible, while the high-tech media installation was relatively unproblematic – a short step away from video art, works were often presented as sculpture, and authorship assigned in the tradition of fine art. But while Net art was largely highly critical, high-tech installations tended to a blind optimism, advertising the cultural value of technology as such. *[Ed]*

[57] This is an elaboration of 'second-wave' cybernetics thinking; see below for more on the cybernetic approach. *[Ed]*

a fictive film. *Faceless* is like an 'exploit' in hacker language – an act of practical critique, an inspired circumvention or subversion of norms or barriers. The use of hacks and other forms of 'creative resistance' is a technique that ambientTV.NET shares with other 'after the Net' artists and groups, including Jaromil, Ubermorgen, Heath Bunting, and Mongrel. Creative resistance can also involve enabling others to become producers: the artist, instead of expressing subjectivity or a universal, becomes facilitator and platform builder[58]. While the artists mentioned have distinct practices and do not associate as a named movement or tendency, they are bound by a common approach, of using creative resistance to illuminate issues of intellectual property and knowledge sharing.

Jaromil[59] creates software art and tools for expression and media activism. One of his exploits as hacker is an extremely terse and elegant fork bomb script – software that will make any Unix system crash – which consists only of the following 13 characters (including spaces):
:(){ :|:& };:
The other side of Jaromil's work – facilitating and platform-building – is exemplified by his *dyne:bolic* project. *dyne:bolic* is an open source 'live CD' – one that can be used to boot a computer. The CD includes the Linux operating system together with tools for multimedia production and distribution, optimised to run on old, slow computers for those with few resources[60].

Ubermorgen's[61] exploits attack corporate and governmental systems with electrifying effect. *[V]ote Auction 2000* was a website that allowed US voters to sell their presidential votes online ('Bringing capitalism and democracy closer together') and, unsurprisingly, caught the attention of the FBI. *Google Will Eat Itself* (conceptually) turns the Google corporation into an autocannibalistic machine by using the income derived from serving banner ads for Google to buy Google shares. *Amazon Noir* unlocked the 'Search Inside' function on Amazon.com's site to obtain entire texts.

Variously self-described as 'net.art pioneer', 'professional revolutionary' and 'retired net.artist', Heath Bunting's[62] hacks straddle digital and material worlds. His *BorderXing Guide* consists of online documentation of walks that cross national boundaries without needing to negotiate border formalities, but the website may only be viewed from designated locations. The recent *Status Project* examines the construction of official identity through corporate and government databases.

[58] Empowered by contemporary information technologies and drawing on the rise of the participatory paradigm through the 20th century, the artist can now fully blossom in this role. See Walter Benjamin's 1934 essay 'The Author as Producer' in *Selected Writings Volume 2, Part 2, 1931–1934* (Cambridge, MA: The Belknap Press, 2005)

[59] http://rastasoft.org

[60] I have written about the work of Jaromil more extensively in 'Root/s Culture', first published in M. Narula, S. Sengupta, J. Bagchi & G. Lovink, eds. *Sarai Reader 05: Bare Acts* (New Delhi: Sarai Media Lab, 2005). 'Root/s Culture' was originally written for Marleen Wynants and Jan Cornelis, eds. *How Open is the Future? Economic, Social & Cultural Scenarios inspired by Free and Open Source Software* (Brussels: Crosstalks, VUB Brussels University Press, 2005).

[61] www.ubermorgen.com

[62] www.irational.org

Mongrel[63] began discussing social software long before the term was taken over by the Web 2.0 industry, and its meaning completely twisted. With *Linked*, *9Nine* and *Skint Stream*, Mongrel created participatory platforms for workshops and projects spanning the world, from council flats in London to the suburbs of Amsterdam, from Johannesburg to Jamaica. An ongoing project is MediaShed, a space dedicated to free media in Southend-on-Sea.

[63] See www.mongrel.org.uk and www.mongrelx.org

Despite obvious differences in practice, there is much common conceptual ground between ambientTV.NET and the other artists cited. Although not fundamentalist about free software, the work of ambientTV.NET is allied with the free media thinking championed by both Mongrel and Jaromil: *Stealth Waltz*[64], made for the 2002 *Kingdom of Piracy* exhibition, illustrates the point. Luksch and Patel also follow a clear open content strategy: most ambientTV.NET works that are offered for sale as objects may also be freely downloaded from the website. Like Heath Bunting, ambientTV.NET strives to demarcate an arena for free action. This is not constructed primarily as a space for personal gratification, but rather to maintain a sustainable living and working environment while avoiding alienated labour or co-optation by commercial interests. Such conditions need to be maintained constantly, and this task becomes part of every new work (there is a reflexivity here). And while many of Ubermorgen's works are online hacks, ambientTV.NET uses a range of different media including film, dance, and sound art. But underlying these various manifestations is a similar critique of extant social and technical infrastructures. Just as in the 'systems', 'process' and 'participatory' art of the 1960s-70s, in the critical art of the early 21st century – Net art after the Net – the social and political aspects of practice do not overshadow the experimental and creative engagement with new forms; indeed, out of this orientation emerges a radical vision that fuses the aesthetic and the ethical – an art for producers, not spectators[65].

[64] In this fictional scenario, all folk music has been removed from the public realm, but a renegade corporation continues to freely distribute music in the proscribed time signatures by embedding it steganographically in 'legal' music.

[65] The critical artists of the early 21st century could be described as taking the epistemological excursion of minimalism (Hal Foster's characterisation) and, reprising another theme of 1960s-70s art, directing it towards social-technological systems. *[Ed]*

Before proceeding to a theoretical sketch to help frame what has been discussed so far, I will summarize the important aspects of ambientTV.NET's work as I have characterised it:
1. While much of the work deals with communication technologies, this is not a privileged point from which engagement with the world proceeds; instead, ambientTV.NET applies a cross-reality concept, exemplifying what I term 'Net art after the Net'.
2. There is a critical interrogation of technology, which comes from a systemic reflexivity about ambientTV.NET's own role and sustainability.

3. This critical stance leads to acts of creative resistance – finding systemic exploits or hacks, or building alternative platforms and infrastructure.
4. Teaching, sharing and facilitating are important parts of the practice, enabling others to appropriate technology for liberating purposes rather than becoming ever more dominated by it.
5. There is a rejection of the intellectual property dogma that the 'content provision' industry clings to, in favour of free (libre) media and free software culture.

THE THINGNESS OF THINGS

The wealth of bourgeois society, at first sight, presents itself as an immense accumulation of commodities, its unit being a single commodity. Every commodity, however, has a twofold aspect – use-value and exchange-value.[66]

[66] Karl Marx *Critique of Political Economy. Part I The Commodity* (1859) online at www.marxists.org/archive/marx/works/1859/critique-pol-economy/ch01.htm

There is at work in contemporary capitalism a very powerful ideology, which combines commodity fetishism and technological determinism to construct a vision of continuous progress through technical innovation. The icons of commodity fetishism are cars and consumer electronics. TV advertisements for these products are the most self-revealing in this regard: in the ads, humans are mere bystanders, while the gadgets do all the singing and dancing. Consumer fetishes are seen as agents of historic progress, but this same agency is denied to humans. From the transistor radio to the Sony Walkman and Apple's iPod, gadgets have captured not only the market but also imaginations. Corporations and marketing agencies have succeeded in manufacturing products that are keys to personal identities. The medium as the message and the massage – in a continually recycled and trivialised McLuhanism – has become a privileged factor in determining human history. McLuhan posited that all technologies were extensions of the nervous system, electronic prostheses, and that different media impacted directly on our ways of perceiving and acting in the world. The proportionate relationship between our senses would determine the ways societies developed. McLuhan saw the 'visual' age of the book in decline while new electronic media – TV, radio and, imagined in an iconic rather than any real form, the Net – would shift the balance towards a more immersive media-scape that favoured the ear and would bring about a new age of instant connectedness between all people. McLuhan's thesis is sweepingly general; however, what he wrote between 1958 and 1964 has had a profound impact on the active making and doing of people in the world and continues to shape

the discourse around new media. The main bug in McLuhan's media theory is its totalitarian tendency – he sees media as the only important factor which shapes history, thereby denying the role of human agency. This way of thinking is called media determinism or, more generally, technological determinism[67].

In *Das Kapital Volume 1*, Marx explains how it comes about that the 'thingness' of products is so deceiving. Since the value of a thing is expressed through its price only, the labour that went into producing it is hidden from sight. Where consumer electronics are concerned, this process bears the signs of sustained accumulation over a long period of time. Not only does the gadget hide the labour of the people who manufactured it, but also centuries of scientific research and development. From the discovery of electricity and radio waves, to the invention of batteries and communication protocols, to the production process and the machines necessary to carry it out, thousands of years of dead labour went into the latest cellphone.

Behind the trendy, cooked-up McLuhanism reinvented as the ideology of the Net lurk hundreds of years of Cartesianism and scientific positivism. At its foundation lies the subject-object dichotomy inherited from Greek philosophy. The world of things is considered to be 'objective', whereas the human world, the social, is 'subjective' and the studies that deal with it, correspondingly less scientific. With our subjectivity we can grasp an understanding of the objective laws of nature only through the scientific method. Technologies use the forces of nature in an intelligent way to transform matter. Conventional thinking positions technology in the world of things, categorically separated from the social. Thus, the scientific world-view and commodity capitalism conspire to fetishise new media technologies as 'things' which belong to an objective reality and exert a determining influence on human life.

The uncritical acceptance and celebration of new technologies by many new media artists only continues this fetishisation. The path of the artists discussed above is different – they scrutinise the intersection of the technical and social, and intervene to reveal the assumptions about or directives towards human behaviour contained there. Technologies are far from being neutral, but have been developed through specific forms of the forces and relations of production. They tend to be deployed in order to sustain these relationships in a historically contingent system of alienation. A specific task of critical art is to lay bare the mystification of the 'thingness

[67] Armin Medosch, 'Technological Determinism in Media Art' (MA dissertation, 2005) online at http://ung.at/cgi-bin/twiki/view/Main/

of things' through creative resistance, by subverting the established order or by proposing altogether different strategies for techno-social development.

This rethinking of the technical and the social as not categorically separated but intimately linked is backed up by recent work in science studies[68]. Science studies analyses scientific research activity and the make-up of the techno-scientific global laboratory. Contemporary theories in science studies suggest that we need to abandon the subject-object dichotomy in favour of a networked model of mutual relationships between things – objects, people, animals, and machines. There are strong parallels between these theories and the work of the critical artists of the artists mentioned above. The artists approach is typically practical and situated, and not at the level of abstract critique – they expose the social content of technology in a way which can be literally grasped, for example by playing the strings of ambientTV.NET's razor-wire harp (an instrument of the *Orchestra of Anxiety*). Through experimentation and practical action, these artists are doing science studies' dirty work. Through creative resistance, critical artists are (re-)socialising technologies, and importantly, democratising access to digital realms where, increasingly, desire, agency, and identity – or the non-fulfilment or lack of these – are located.

[68] See the work of Bruno Latour, Donna Haraway and others; for a good summary: Jutta Weber *Umkämpfte Bedeutungen* (Frankfurt: Campus Verlag, 2003)

THE SYSTEMS APPROACH

In the late 1960s and early 1970s, artist, curator and theorist Jack Burnham wrote about a shift in art practice from the making of objects to the establishment of systems, from product to process – the rise of 'systems aesthetics'[69]. Burnham's systems aesthetics speaks about art that engages in an open-ended manner with its environment (so that the context of the work affects it over its duration); it signals a move away from formalism, representation and simulation towards emulation and parasitic siting. Writing then about artists such as Hans Haecke, Burnham's formulation of systems aesthetics finds renewed application in the interpretation of today's Net artists 'after the Net'. The digital network is the host for 21st century critical-parasitical works such as *Broadbandit Highway* and *Amazon Noir*.

[69] Jack Burnham, 'Systems Esthetics', *Artforum* September 1968, reprinted in Donna De Salvo, ed. *Open Systems: Rethinking Art c. 1970* (London: Tate Publishing, 2005)

Burnham reflected more generally on the changing conditions for artists – and, accordingly, their changing role – in the highly industrialised societies of the 1960s. Referring to the economist J. K. Galbraith, who posited that 'an incipient

technocracy shaped by the evolving technostructure' (whether that of Californian think tanks or Soviet futurologists) was 'smoothly implementing social change', Burnham remarked that 'power resides less in the control of the traditional symbols of wealth than in information.'[70]

[70] ibid., p. 166

This statement is an early example of what has evolved into current day 'informationalism'. The assertion that we live in an 'information society' is so familiar that we may be seduced into believing that it is simply a statement of fact. However, it is no less ideological a doctrine than Marxism or neoliberalism. Endorsing Galbraith's 'technocracy' and adopting a world-view heavily informed by third-wave cybernetics[71] or 'systems thinking', Burnham sees a special role for the artist. He postulates that we are moving from an 'object-oriented to a systems-oriented culture'[72]. Under such conditions, the artist should 'liquidate [their] position as artist vis-a-vis society', and instead start making aesthetic enquiries about the future of technology – in other words, join the technocracy:

Gradually this strategy transforms artistic and technological decision-making into a single activity – at least it presents the alternative in inescapable terms. [...] Progressively the need to make ultrasensitive judgements as to the uses of technology and scientific information becomes 'art' in the most literal sense.[73]

The elitism of this statement and its relationship to McLuhanism are clear. But it also anticipates (in a manner that Burnham may not have expected) contemporary critical art practices. ambientTV.NET and its peers make judgements about, or suggest interpretations of, technologies, but outside the official context of scientific research and technocratic rule.

[71] Cybernetics (as defined by Norbert Wiener, who established it as a discipline) is the study of control and communication processes in living or non-living systems. A key feature of such processes is feedback. *[Ed]*

[72] Burnham, op. cit., p.165

[73] ibid., p.166

German sociologist Niklas Luhmann, similarly influenced by cybernetics, was the first to render a systems approach in the terms of social theory. Luhman understands systems as generalised symbolic orders that are self-organising, and significantly, autopoietic (self-generating). Within his theory, Luhmann also explains the autonomy of art. He places the trajectory of art alongside the development of bourgeois society in modernity. Differentiation enabled art to become a system whose values are defined from within, guaranteeing its autonomy. In the past, the art system's competency and distinctiveness lay in its unique ability to make aesthetic judgements (beautiful/ugly) – the second most important opposition being that between truth and falsity (from the old

Hegelian philosophy of art). Luhmann goes on to identify other value pairs that play increasingly important roles in the 20th century, as artists subscribe to an anti-aesthetics and make social change their main objective. Thus, for many movements in art, the main value pair is now socially progressive/regressive[74]. Luhmann's fear is that by abandoning aesthetics, art loses what makes it unique. If society as a whole becomes the canvas on which an artist wishes to paint, the artwork might become indistinguishable from everyday life[75].

ambientTV.NET's works interrogate both the value pairs, progressive/regressive and beautiful/ugly; they have not abandoned aesthetic sensibility, but rather deployed it as part of a holistic practice based in social critique. While they do not directly reference Burnham, Luhmann, or cybernetics, their oeuvre signals a return to and a going beyond of 1960s-70s radicalism. Traces of Hans Haecke and Martha Rosler, and the revisitation of cornerstone issues such as free media and self-organisation, are evident. But this is not a simple return. Despite everything cybernetic being terribly intellectually fashionable these days, and no page of the Macy Conferences transcripts remaining unturned, the locus of critical art practice has shifted from 'system' to 'Net' – in anticipation of (and in response to) a parallel shift in the socioeconomic realm.

Reality Check

The core of ambientTV.NET has stabilized around Luksch and Patel, with the artists continuing their practice from ambient.space, while maintaining the website as a publishing portal, and 'Ambient Information Systems' as production company. As pressure on land increases in the city, they continue to explore ways of weaving the studio into the fabric of their envisioned social and technical infrastructure. In 2008, ambient.space – always something of a caravanserai for digital nomads – hosted a series of artists-in-residence. Extending an idea of Wolfgang Staehle's (one of the participating artists), the guests were invited to address the view from the studio out over a city undergoing rapid redevelopment for the 2012 Olympics.

South Hackney continues to attract artists, ahead of and behind whom scurry the developers. And just as in ShoHo, the development of a creative hub has further marginalised old inhabitants. Against a background of spiralling property prices,

[74] Hal Foster describes this phenomenon as a shift from the criterion of quality to one of interest. *[Ed]*

[75] Niklas Luhmann, 'Ist Kunst codierbar' in *Aufsätze und Reden* (Stuttgart: Reclam, 2004), pp. 159–197. First published in Luhmann *Soziologische Aufklärung 3: Soziales System Gesellschaft, Organisation*, pp. 245–266 (Opladen: Westdeutcher Verlag, 1981)

[76] Benedict Seymour and David Panos have explored the territory as The London Particular: 'As [Western cities] lose their remaining manufacturing base and more and more middle class service jobs migrate to Asia many have been forced to re-brand as 'Cities of Ideas'. [...] Seen in this context Creative London is far from being a manifesto for dynamism. Rather it is a defensive strategy that seems unlikely to deliver much apart from increased precariousness for the majority of working Londoners.' – From David Panos 'Creative Clusters', available from http:/thelondonparticular.org/items/creativeclusters.html *[Ed]*

local authorities have colluded with (often offshore) investors, offering them premises at below auction value while turning a blind eye to evictions of long-standing tenants[76]. Broadway Market is one of the front lines – a street of betting shops and lifestyle vendors, greasy spoons and delis, cheap corner stores and extortionate real estate agents, and since 2004, home to a vibrant weekly farmers' market. The produce may be local and organic, but the landlords are absentees (in the Bahamas, in Moscow), and the development, cynically planned. Two established businesses, Francesca's Cafe (run by Tony Platia for over 30 years) and Spirit's Nutritious Food Gallery, became cause célèbres, with novelist Hari Kunzru writing of attempts to evict them in *The Guardian*[77]. While Spirit has managed to eke out his tenancy into late 2008 (despite a possibly illegal rejection of his offer to buy, and massive rent increases), Tony was evicted in 2005 and the cafe demolished, despite a spirited occupation of the building. Three years later, Spirit lost his premises too. The gentrification of Broadway Market, and the explosion of (New York) Chelsea-style galleries along neighbouring Vyner street – points to a future like that of ShoHo.

[77] 'Market Forces', *The Guardian*, 7 December 2005 www.guardian.co.uk/g2/story/0,,1660371,00.html and 'A dispatch from Tony's cafe', *The Guardian*, 6 January 2005 www.guardian.co.uk/society/2006/jan/05/regeneration.g2

This intensification of life on the street is also reflected in the corridors of power. The subsumption of all artistic activity under the term 'creative industries' continues, despite evidence that they have not delivered the market miracle hoped for by government. The effects of the new economy bust hit the creative industries in 2002 when, against the predicted annual increase in employment of 6% (a valid figure for 1997–2000), some sectors (including broadcast) actually contracted. In 2005, The European Institute for Progressive Cultural Policies published a report (*European Cultural Policies 2015*)[78] that reveals what the phantasm of the creative class has done to politicians and art administrator's minds. Not only does the 'clear trend of instrumentalisation of art on part of the state'[79] continue, but also 'the classic humanist-bourgeois tradition of supporting "non-mainstream" work and art with a narrow public has now been replaced by economic and functionalist attitudes and actions.'[80] Author Gerald Raunig expects that 'there will be an even closer interweaving of these three lines of identity culturalism, governmentality control, and renewed authoritarian intervention on the part of a nation-state otherwise staging its retreat.'[81] In the same publication, Rebecca Gordon Nesbitt hedges the suspicion that 'the Arts Council England is preemptively exempting itself from support' before it is shut down for good.

[78] Maria Lind &Raimund Minichbauer, eds. *European Cultural Policies 2015: A Report with Scenarios on the Future of Public Funding for Contemporary Art in Europe* (London, Stockholm, Vienna: eipcp, 2005)

[79] ibid., p 8

[80] ibid., p 9

[81] ibid., p 29

Whoever speaks of culture speaks of administration as well, whether that is his intention or not.[82]
– The necessity for uncompromising political art continues to grow with late capitalism's increasing capacity to absorb and commodify critique. But this critique must be folded in ever more, to expose minimal surface to capital's corrosiveness[83]. Too commonly today, artists' autonomy trumps social and political engagement (or lack of it). The slogan 'you call it art/ we call it independence' indicates that ambientTV.NET has attempted to set itself up as a counter-environment to 'reclaim the world' (as Thomas Hirschhorn demands contemporary art must do)[84]. Luksch and Patel declare autonomy to be a necessary precursor to engagement – not an alternative to it. Their engagement involves playing with and critiquing existing social-technical infrastructures and envisioning tenable alternatives. This maturing practice suggests a strategy for critical art that may spawn further islands of freedom in the Net.

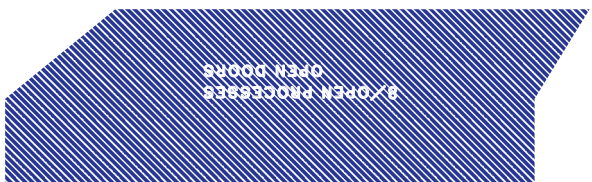
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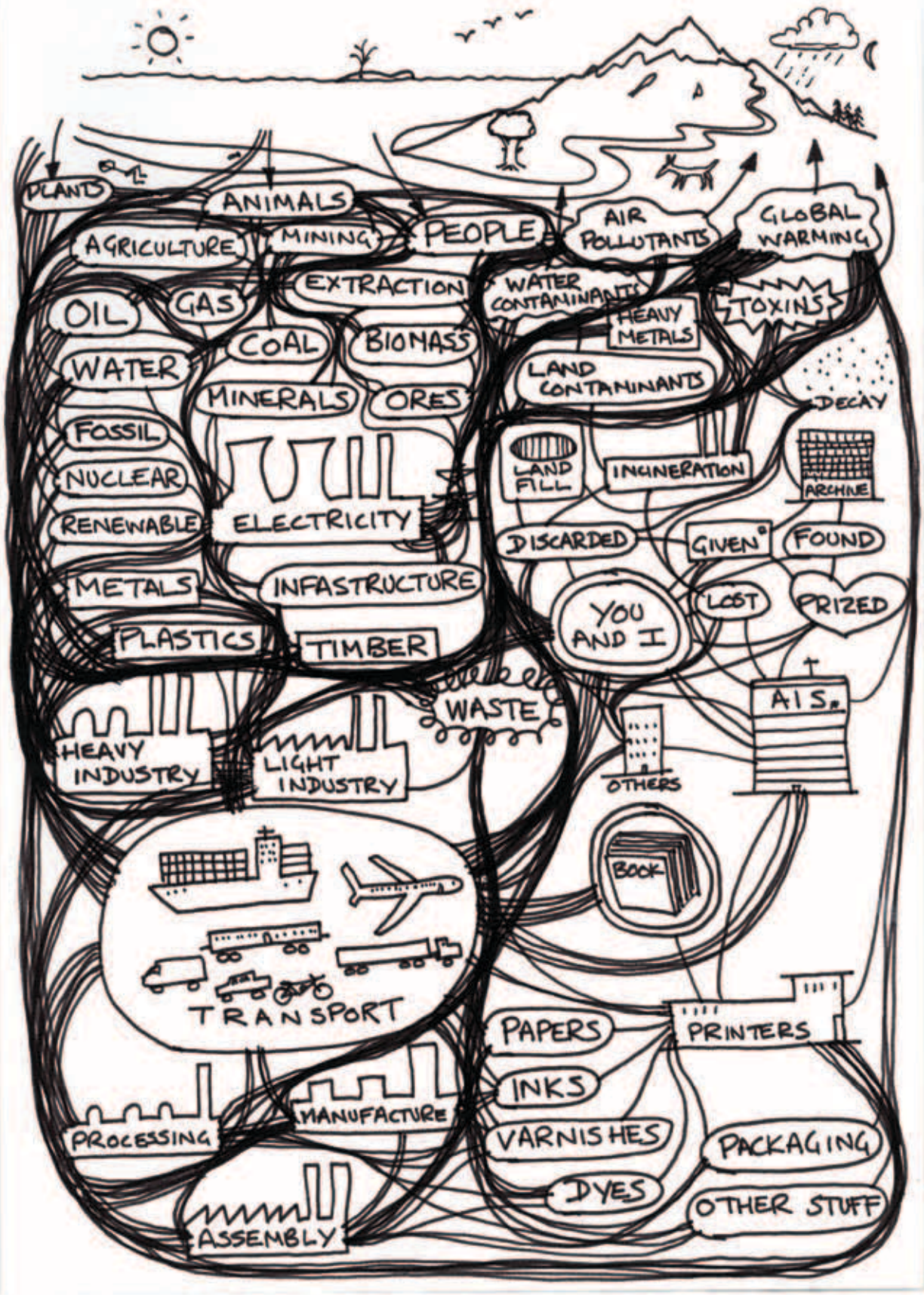
[82] Theodor Adorno 'Culture and Administration' in *The Culture Industry: Selected Letters on Mass Culture*, p. 93 (London: Routledge, 1991)

[83] McLuhan usefully described art as a counter-environment that renders visible what is normally hidden. But the cultural logic of late capitalism is such that it devours everything, including its critiques, and refashions and commodifies them. *[Ed]*

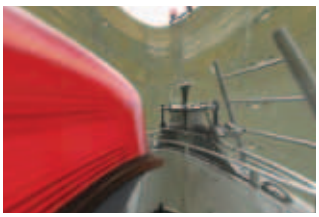
[84] Hirschhorn interviewed by Okwui Enwezor in James Rondeau & Suzanne Ghez, eds. *Jumbo Spoons and Big Cake* (Chicago: Art Institute of Chicago, 2000)

D'où venons-nous?
Que sommes-nous? Où allons-nous?
(Peter Grech, 2007)




PLANTS
ANIMALS
AGRICULTURE
MINING
PEOPLE
AIR POLLUTANTS
GLOBAL WARMING
EXTRACTION
WATER CONTAMINANTS
HEAVY METALS
TOXINS
OIL
GAS
COAL
BIOMASS
WATER
MINERALS
ORES
LAND CONTAMINANTS
DECAY
FOSSIL
NUCLEAR
RENEWABLE
ELECTRICITY
LAND FILL
INCINERATION
ARCHIVE
DISCARDED
GIVEN
FOUND
METALS
INFASTRUCTURE
YOU AND I
LOST
PRIZED
PLASTICS
TIMBER
WASTE
AIS
HEAVY INDUSTRY
LIGHT INDUSTRY
OTHERS
BOOK
TRANSPORT
PAPERS
PRINTERS
INKS
PROCESSING
MANUFACTURE
VARNISHES
PACKAGING
DYES
OTHER STUFF
ASSEMBLY

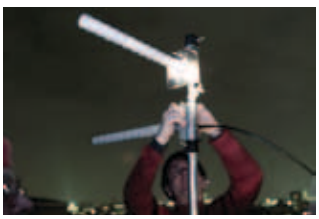
9/INDICES











CATALOGUE OF WORKS

acoustic.space.lab VR 2001
single screen video, 4:3 DV (15 min)
Manu Luksch, Sara Kolster, Mukul Patel
with: Paul Khera (graphic design), Voldemars Johansons (dijeridu)
experimental Quicktime VR documentary about ex-Soviet radiotelescope
shows: Irbene and e-Lab, Riga (2001)
commissioned by: *acoustic.space.lab*
www.ambientTV.NET/2001/asl

Aju J.'s New Year Feast – In the Year of the Fire Dog 2006
single screen video installation; food cans (10 min)
Manu Luksch & Mukul Patel
with: Aju Jupoh (chef/presenter)
preparation of a traditional Akha New Year's feast of sautéed dog
shows: Temporary Art Museum Soi Sabai, Thailand (2006); 5th Bangkok Experimental Film Festival (2008); ambient.space (2008); International Short Film Festival Oberhausen (2009)
www.ambientTV.NET/content/?q=firedog

ambient.lounge 2006
installation of curated works; participatory space
Manu Luksch & Mukul Patel
with: Rachel Baker, Ilze Black, Tina Hage, Juha Huuskonen, Lektrolab (Emma Davidson & Paul B. Davis) (commissioned/curated by ambientTV.NET)
space to browse works; to discuss, reflect, relax and dream
shows: *Satellite of Love* at Witte de With for the 35th International Film Festival Rotterdam, (2006); *Connecting Worlds* at NTT ICC, Tokyo (2006)
commissioned by: Witte de With/TENT
supported by: NTT ICC (InterCommunication Center)
www.ambientTV.NET/content/?q=ambientlounge

ambient.vista 2008
international artist-in-residence programme
Manu Luksch & Mukul Patel
with: Wolfgang Staehle, Fahim Amir, Tuomas Toivonen, Shiho Fukuhara (commissioned artists)
artists address ambient.space's unique, spectacular aspect over London
shows: E:vent gallery, V22 Wharf Road, Austrian Cultural Forum London (2008)
supported by: Mr. Simon Bishop, Arts Council England, Austrian Cultural Forum London, Embassy of Finland, The Japan Foundation, E:vent gallery
www.ambientTV.NET/content/?q=ambientvista

ambient.wireless 2001 onwards
network infrastructure; lab/workshops
Ilze Black, Manu Luksch, Mukul Patel
with: free2air, consume.net, Alexei Blinov, Ten Yen, Darron Broad
developing wireless broadband infrastructure for independent media and community initiatives
supported by: LSE, National AIDS Trust, Reuters (equipment donors)
published in: Armin Medosch, *Freie Netze* (Heise 2003)
www.ambientTV.NET/wireless

AV Dinners: Epic Eros 2003

networked live performance; multiple online streams; documentation video, 4:3 DV (15 min)

Manu Luksch & Mukul Patel

with: Anthony Auerbach (chef), Mariko Montpetit (chef), Gavin Starks (stream), Shane Solanki (poetry), Kelli Dipple (presenter)

ritualised feast for the Internet age: cooking documented by miniature cameras and microphones in kitchen appliances and streamed live; winners of an online quiz fed the gourmet dishes at ambient.space; remote participants mix streams of manipulated cooking sounds, a poet mulling the menu, and TV cookery show-style commentary

shows: *SEX FOOD POLITICS*, Moon Radio online (2003); *Contemporary Video Art* at Yo! Below Video Art Gallery, Edinburgh (2003); MYYMÄÄLÄ, Helsinki (2003)

commissioned by: Moon Radio Web TV

www.ambientTV.NET/3/avdinners



Bow Space 2004

single screen video, 4:3 DV (10 min)

Manu Luksch & Mukul Patel

with: Doris (local history narrator and senior citizen)

reminiscences of older residents of Bow, East London, recorded to create an audio-visual memory map of the fast-changing neighbourhood

shows: Bow Festival, London (2004); *Connecting Worlds* at NTT ICC, Tokyo (2006)

commissioned by: Bow Festival 2004

www.ambientTV.NET/4/bow



Broadbandit Highway 2001

video from found webcam streams (length 5 years)

Manu Luksch & Ilze Black

with: Sneha Solenki, Kate Rich (soundtrack)

self-generating road movie for ambient television; uses JavaScript to hijack video streams from traffic surveillance webcams around the world and montage them into a real-time 24/7 road movie

shows: *Please Disturb Me* at the Great Eastern Hotel, London (2001); 24th International Moscow Film Festival 2002 (award); Watershed, Bristol (2003); *Satellite of Love*, Witte de With, Rotterdam (2006); *Connecting Worlds*, NTT ICC, Tokyo (2006)

commissioned by: *Please Disturb Me*

www.ambientTV.NET/2001/broadbandit/broadbandit



Channel 26 2001

curated video art channel

Ilze Black & Manu Luksch

with: Franko B, Shu Lea Cheang, F5, Bureau of Inverse Technology, Andree Korpys & Markus Löffler, Chapman Brothers, Derek Ogbourne, Motoko Ohinata, Richard Wright (curated artists)

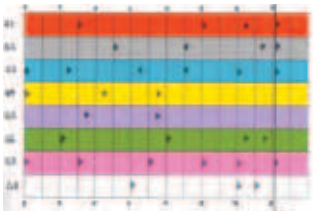
invited to place work in the hotel, ambientTV.NET took over an internal TV channel

shows: London's Great Eastern Hotel's TV channel number 26 for the *Please Disturb Me* show (2001)

commissioned by: *Please Disturb Me*

supported by: The Felix Trust for Art

www.ambientTV.NET/2001/broadbandit/disturb



Diaspora.In.Synchro.City 2003
travelling sound work for eight ghettoblasters, with choreography for public space (15 min)
Mukul Patel
performed by: Ssshhhhh... Ghettoblaster Ensemble
nomadic city soundscape based on field recordings made across India
shows: *Streets of Asia*, Århus Festuge (2003)
commissioned by: Århus Festuge
www.ambientTV.NET/3/disc



Digital Analogue Soundclash 2004
live sound performance
Tuomas Toivonen & Mukul Patel
shows: Fylkingen, Stockholm and Kiasma Theatre, Helsinki for *pixelACHE 2004*



England Expects... (Nelson- not -Nelson) 2004
travelling sound work for seven ghettoblasters and megaphone, with choreography for public space (10 min)
Mukul Patel
performed by: Ssshhhhh... Ghettoblaster Ensemble
with: Michael Uwemedimo
unofficial sonic history of Trafalgar Square, in anticipation of Nelson's Bicentennial in 2005
shows: *Square Perspectives*, Trafalgar Square, London (2004)
commissioned by: Greenwich & Docklands Festival
www.ambientTV.NET/content/?q=ee



The Eye (1 & 2) 2005
mass choreography workshops for surveilled space; video, 4:3 DV (8 min)
Manu Luksch
with: George Piper Dances (The Ballet Boyz); Alluminae Dance Company
site-specific open choreographic workshops for shopping mall and housing estate; dance to be viewed from above by surveillance cameras
supported by: Austrian Cultural Forum London, Arts Council England, Watermans Arts Centre
www.ambientTV.NET/content/?q=theeye

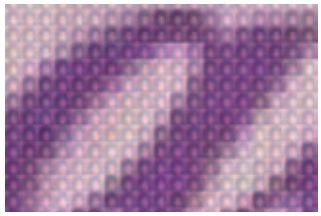


Faceless 2007
science fiction film, 4:3 DigiBeta/DVD with 5.1 surround sound (50 min)
Manu Luksch
with: Mukul Patel (cowriter, soundtrack), Tilda Swinton (voice), Rupert Huber (piano); Amour Fou Filmproduktion (coproducer)
produced under the Manifesto for CCTV Filmmakers*; uses only CCTV recordings obtained under the UK Data Protection Act*
shows (selected): 2007 – *DIAGONALE* (Graz), *ENTER_Unknown Territories* (Cambridge), *pixelACHE* at Kiasma (Helsinki), Galerie im Taxipalais (Innsbruck), *JONCTION* festival (Brussels), La Ligue des droits de l'Homme (Brussels); 2008 – *fonction/fiction* at Dazibao (Montréal), Galerie Motte & Rouart (Paris), *Hors Pistes* at Centre Pompidou, Xenix-Kino (Zurich), *Teleport Färgfabriken* (Östersund), *EXIT* festival (Creteil), *RECODED* at the Peacock Gallery (Aberdeen), *LIFT* (London), *Atlas of the Future* at Strozzina CCC (Firenze), 28th Cambridge Film Festival, *dokument ART* (Neubrandenburg, Szczecin), *Recontres Internationales Sciences et Cinémas* (Marseille), *Don't You #$&ing Look At Me! Surveillance in the 21st Century* at 911 Seattle Media Arts Center, *Filmavantgarde und*

aktuelle Videos aus Österreich at HMKV (Dortmund), ARGEkultur Salzburg, *Surveillance and Discipline in Public Space* at the Art Gallery of Kosovo (Prishtina); 2009 – ARoS Århus Kunstmuseum, *STAND UP Art about Human Rights* (Poznan), *Are the kids alright?* at Westwerk (Leipzig)
supported by: Arts Council England, Innovative Film Austria, Isis Arts
www.ambientTV.NET/content/?q=facelessthemovie



Faceless: The Spectral Children 2006
4-screen video installation; surround sound (15 min)
Manu Luksch
with: Mukul Patel (cowriter, sound), Amour Fou Filmproduktion (coproducer)
produced under the Manifesto for CCTV Filmmakers*; CCTV recordings obtained under the UK Data Protection Act as 'legal readymades'*
shows: 2006 – Gallery Barry Keldoulis, Sydney; 2007 – *Festival of Free Thinking* (Liverpool), DEAF 2007 (Rotterdam), *Digitally Yours* at Aboa Vetus & Ars Nova Museum (Turku); 2008 – Galerie Motte & Rouart (Paris), CAMP (Bombay)
www.ambientTV.NETcontent/?q=spectralchildren



Fair & Lovely 2005
inkjet print, 955 x 250 cm; site-specific installation
Mukul Patel
billboard for India's leading skin-lightening cream, featuring a young prince of pop
shows: *Bombay, Badarpur Border* at Apeejay Media Gallery, New Delhi/Haryana border (2005) – first new media art show in India, together with Shaina Anand and Ashok Sukumaran
www.ambientTV.NET/5/bbb



flipflop 2002
research & development of telematic performance (mixed media)
Manu Luksch & Mukul Patel
with: Ajay Naidu, Michael Uwemedimo (performers); Anthony Auerbach, Andrea Zimmerman
technological and artistic feasibility study for a critical networked media performance
supported by: Austrian Cultural Forum London, BKA .kunst, London Arts Board, Future Physical
www.ambientTV.NET/3/flipflop



FLY STORIES: Migration, Movement, Mobility 2005
curated film programme for 'road cinema' (scooter, projector) with live interpreter
Manu Luksch
with: Navin Rawantchaikul (initiator of *Fly With Me To Another World* project); exyzt, Virgil Widrich, Bady Minck, Axel Stockburger, George Piper Dances, Kaw Lah Film collective, Santiphap Inkong-ngam, Alain Bourrillion, and VJ Nokami, plus Akha karaoke videos (curated films)
programme of films on migration; once commonplace in Thailand, 'road cinema' is drive-in in reverse, a mobile cinema that drives to the audience
shows: villages in Northern Thailand (2005)
commissioned for: *Fly With Me To Another World*
supported by: Goethe Institute Chiang Mai
www.ambientTV.NET/5/flystories



FRAMED: THE MINISTRY, FRAMED: THE TRANSPORT, FRAMED: THE MONEY 2003
three inkjet prints, each 300 x 91 cm (unique edition)
Manu Luksch
image series from the Faceless *project*
shows: Gallery Barry Keldoulis, Sydney (2006)
www.ambientTV.NET/content/?q=framed



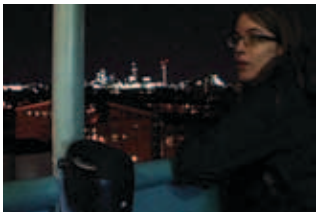
Hinges On 2005
mixed media participatory installation (multi-channel sound, multiple video projectors, computers, custom hardware and software)
Thomas Abraham, Umang Razdan Bhattacharya, Priyanka Dilip, Ishan Ghosh, Ramyah Gowrishankar, Pratima Kalmadi, Nishita Kavadia, Siddharth Muthyala, Salam Hidish Singh, K. T. Thomas, Divya Viswanathan (students at Srishti School of Art, Design and Technology, Bangalore)
led by: Manu Luksch & Mukul Patel (tactical media lab)
responsive media environment on 'grey zones' of Bangalore's IT industry
shows: Srishti, Bangalore; Ars Electronica, Linz (2005)
commissioned by: Srishti School of Art, Design and Technology
www.ambientTV.NET/5/srishti



Housed 2002
multi-room site-specific sound installation
Mukul Patel
for Athina Vahla's site-specific promenade dance installation at the Shipwright's Palace, Deptford, based on Conrad's Heart of Darkness
shows: *The House*, Deptford (2002)
commissioned by: Athina Vahla/Prised Open
http://onesquareyard.com/localExamples/houseOfKurtz



I wish to apply, under the Data Protection Act, for any and all CCTV images of my person held within your system. I was present at [place] from approximately [time] onwards on [date]. 2006
three inkjet prints in light boxes, each 150 x 37 cm
Manu Luksch
excerpts from letters exchanged during the Faceless *project*
shows: *Goodbye Privacy*, Ars Electronica and *Talking the fish*, Medienkunstlabor KunstHaus Graz (2007)
www.ambientTV.NET/content/?q=iwishtoapply



il barone rampante 2008
10-channel site-specific sound installation
Mukul Patel
dusk chorus for steel roosts, counterpointing lights on London's skyline
shows: *recursively yours*, at ambient.space (2008)
www.ambientTV.NET/content/?q=recursively



Indian Standard Time 2006
public clocks (sound, light and video installations based on custom software; intervention in SNCF public announcement system)
Mukul Patel
suite of idiosyncratic site-specific public clocks based on ancient and modern Indian ideas and experiences of temporality
shows: *Bombaysers de Lille* (2006)
commissioned by: Lille3000
www.ambientTV.NET/content/?q=IST

Karaoke Busking 2002

live sound performance, released on CD (77 min)
Manu Luksch & Mukul Patel
with: Paul Brett (harmonica)
laptop jam session with busker; accompanies photographs by Victoria Buivid and Olga Chernysheva (of metro stations in Moscow)
shows: *Anti-Fashion* at White Space Gallery, London
commissioned by: White Space Gallery
www.ambientTV.NET/2002/kbusking



Love, Piracy, and the Office of Religious Weblog Expansion 2009

installation/performance, book- and net art
Manu Luksch & Mukul Patel
with: Ali Alizadeh (interviewee), Elke Michlmayr (website coding)
procedural, unique censorship of a text in each copy of this volume, carried out out at book launches; may be circumvented by a collaborative reading online
www.ambientTV.NET/love



Make it snow! make it snow! make it snow! 2008

single screen video, 4:3 DVCAM (1 min)
Manu Luksch
with: Mukul Patel
short meditation on the ecological impact of the winter sports industry
shows (selected): 2008 – International Youth Arts Festival (Beijing); China Central Television Channel 1; *Stop.Watch* at Spacex (Exeter), CCA (Glasgow), ZKM (Karlsruhe), *Urban Screens 08* (Melbourne), Museo de Arte del Banco de la República, (Bogota), Khoj Centre (New Delhi)
commissioned by: Animate Projects and RSA Arts & Ecology in association with Arts Council England and Channel 4
www.ambientTV.NET/content/?q=makeitsnow



Manifesto for CCTV Filmmakers 2004

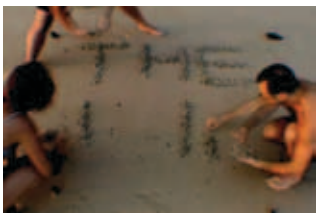
text; prints (dimensions variable)
Manu Luksch
with: Mukul Patel
set of rules and effective procedures for filmmakers working in surveilled zones, where access to CCTV recordings is legally mandated
published in: *NODE.London Reader* (2006), *Vertigo* magazine Vol. 4 #1 (2008)
shows (selected): 2007 – *Talking the fish*, Medienkunstlabor KunstHaus Graz; 2008 – *RECODED* at the Peacock Gallery (Aberdeen), *Don't You #$&ing Look At Me!* at 911 Seattle Media Arts Center; 2009 – *STAND UP Art about Human Rights* (Poznan), *Are the kids alright?* at Westwerk (Leipzig)
www.ambientTV.NET/content/?q=dpamanifesto



Mapping CCTV in Whitehall 2008

intervention in public space; documentation video, 4:3 DV (3 min)
Manu Luksch
with: Mukul Patel
mapping of CCTV surveillance in the SOCPA zone; alerting passers-by as they enter surveilled areas
shows: *Kodawari Life Europe* on NHK BS-1 and BS-Hi (Japan), LIFT (London International Festival of Theatre), *Almost Cinema* at the 35th Flanders International Film Festival (Ghent) (2008)
www.ambientTV.NET/content/?q=mappingcctv





Movie Stars 2004
silent video, 4:3 DV (30 sec)
Manu Luksch
with: Anthony Auerbach, Chris Helgren
record of extraordinary mass behaviour of starfish found on a remote beach in Thailand
shows: *Out Video* festival, Ekaterinaburg (2004); *TRANSMEDIA:29:59*, Toronto (2005)
www.ambientTV.NET/content/?q=moviestars



Myriorama 2004
telematic media performance (45 min) in surround-audiovisual environment
Manu Luksch & Mukul Patel and kondition pluriel (Martin Kusch & Marie-Claude Poulin)
with: Martin Bélanger, Shane Solanki (performers); Diana Baldwin, Equal-I, Pete Gomes, Niki Gomez, John Hopkins, Christian Nold, T. J. Rehmi (roamers); Anthony Auerbach, Alexandre Burton, Mo-Ling Chui, Camalo Gaskin, David Muth, Gavin Starks
dance piece interrogating the data environment; based on Calvino's 'A King Listens'; combines locative media and local motion-tracking
shows: Kiasma Theatre, Helsinki for ISEA 2004; Project Market, Quaker Street, London (2004)
supported by: Arts Council England, Austrian Cultural Forum London, Austrian Embassy Helsinki, BKA .kunst, Conseil des arts et des lettres Québec, Québec Government Office London
www.ambientTV.NET/4/myriorama

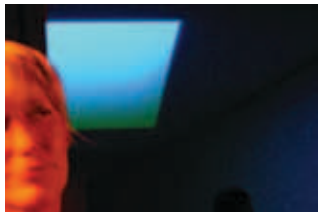


A New and Exciting Experience 2008
mixed media (surround-sound installation, text banners 400 cm x 90 cm), dimensions variable
Manu Luksch & Mukul Patel
with: the SPACE Age Sirens choir led by Laka D.
the story of a woman who does everything by the booklet: works based on texts of user manuals
shows: SPACE Studios, London (2008); ambient.space (2008); NIMK (Nederlandse Instituut voor Mediakunst), Amsterdam (2008-09)
commissioned by: THE NOT QUITE YET, a collaboration between Queen Mary, University of London and SPACE Media
www.ambientTV.NET/content/?q=excitingexperience



Orchestra of Anxiety 2005
participatory installation in mixed media (stainless steel, razor wire, chain-mail gauntlets, computers, projectors, multiple speakers, custom hardware and software)
Manu Luksch & Mukul Patel
with: John Ashworth
audio-visual instrument (harp) made using materials and technologies of the security industry
shows: Watermans, London (2005); Design Factory, Bratislava (2006); 12th International Computer Art Festival at Kibla, Maribor (2006); *databodies* at Paradiso, Amsterdam (2006); *Soho in Ottakring*, Vienna (2007)
commissioned by: Watermans Arts Centre
supported by: Austrian Cultural Forum London, British Council Slovakia, *Soho in Ottakring*
www.ambientTV.NET/5/ooa

phoneme 2005
sound and light installation (dimensions and equipment variable)
Mukul Patel
with: Vena Ramphal, Ryuichi Sakamoto, Mohith Keshava Shastri, Norika Sora (voice recording)
very slow exploration of phonemes of pairs of languages in sound and light; current iteration uses sound particles of Sanskrit and Japanese
shows: 149 Ludlow St., NYC (2005); *recursively yours*, ambient.space (2008)
supported by: THE THING artist residency (NYC)
www.ambientTV.NET/content/?q=phoneme



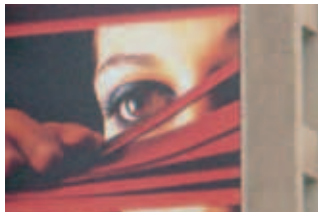
record with the sound of its own making 2008
12" vinyl record, edition of 10 + 2 artist's copies
Mukul Patel
with: Frank Merritt at The Carvery (cutting)
based on site-specific sound work for Shobana Jeyasingh Dance Company; after Robert Morris's Box With the Sound of Its Own Making *(1961)*
shows: *recursively yours*, ambient.space (2008)
www.ambientTV.NET/content/?q=recordsound



renumber 2001
sound work (7 min, stereo)
Mukul Patel
with: Makrolab (audio capture), Derek Holzer (sweetening)
process music comprised of manipulations of ship-shore satellite phone conversation intercepted by Makrolab using RT-32 radio telescope
shows: Irbene and e-Lab, Riga (2001)
supported by: *acoustic.space.lab*
www.ambientTV.NET/2001/asl



Standing up to close scrutiny 2002
photographic prints, each 120 x 84 cm
Manu Luksch
shows: *Urban Jealousy* – 1st International Roaming Biennial of Tehran in Berlin, Istanbul and Belgrade (2008–09)
www.ambientTV.NET/content/?q=scrutiny



Stealth Waltz 2002
net art
Manu Luksch & Mukul Patel
depicts privatization of the public domain; provides steganographic tool to subvert it
shows: ISEA 2002 (Nagoya); Ars Electronica 2002 (Linz); DEAF 2003 (Rotterdam); FACT, Liverpool (2003); Yerba Buena Center for the Arts, San Francisco (2004)
commissioned by: *Kingdom of Piracy*
www.ambientTV.NET/2002/2



Suvara 2002
music workshop; audio CD/double vinyl LP (78 min)
Mukul Patel and Radio FRO 105.0 MHz Linz
with: Rafi Hanif & Party (musicians)
reinterpretations of traditional Afghani song, following music workshop
published by: Radio FRO 105.0 MHz Linz
www.ambientTV.NET/3/suvara





Tannoy 2005
10-channel site-specific sound installation
Mukul Patel
with: Akshaya Pandit (voice)
disruptive audio guide to the group show
shows: *Bombay, Badarpur Border* at Apeejay Media Gallery, New Delhi/Haryana border (2005) – first new media art show in India, together with Shaina Anand and Ashok Sukumaran
www.ambientTV.NET/5/bbb



TELEJAM_01/DELAY_28 2001
networked performance: distributed audio-visual improvisation; documentation video, 4:3 DV (13 min)
ambientTV.NET (Manu Luksch, Mukul Patel & Kertal) and rigasound.org
with: the Milky Bar Kid, DJ heincha, d-9, gonzalez, heleena, NEI, Linards Kulless, MKII, pk
sound and video jam between London and Riga; media streams relayed and mixed in 'delayed synchrony'
shows: Public Life (London) and Casablanca (Riga)
www.ambientTV.NET/telejam



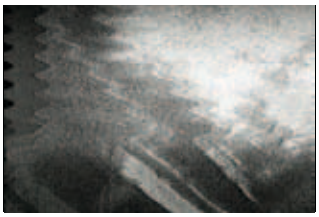
TELEJAM_02/FRO_03 2001
networked audio-visual performance
ambientTV.NET (Manu Luksch, Mukul Patel & Ilze Black), rigasound.org and Radio FRO 105.0 MHz Linz
with: Mario Ventrelli, vortex, Fadi Dorninger, Dietmar Bruckmayr, Kulless, Ratnix, dill9jah, mums speelees Ivarx & @TOMS *et al*
audio-visual jam extended across three remote locations to celebrate the 3rd anniversary of independent Austrian FM station Radio FRO 105.0
shows: ambientTV.NET studio, Dizzi club (Riga) and Posthof (Linz)
www.ambientTV.NET/telejam



The Mistake 2008
chalk writings in public space
Manu Luksch
adaptation of Joseph Beuys' 1985 Manifesto
www.ambientTV.NET/content/?q=themistake



The Order 2009
100 video monitors & DVD players; 100 photographic prints on aluminium (dimensions variable)
Manu Luksch
video & photographic portraits of 100 riot police officers who surrounded the artist in Trafalgar Square, May Day 2000
www.ambientTV.NET/content/?q=theorder



The Spy School Exercise #1 2002
public intervention (mixed media)
Manu Luksch & Mukul Patel
with: Michael Uwemedimo, Gavin Starks, Jaromil
performers with wireless spy cameras confront festival visitors with their own data shadows
shows: *VideoZone*, Center for Digital Art (Tel Aviv)
supported by: Israeli Center for Digital Art
www.ambientTV.NET/3/spyschool/1

The Spy School Exercise #2 2002
site-specific projection in public space (15 min)
Manu Luksch
with: Mukul Patel (sound), Michael Uwemedimo (capoeirista), Lizzie Tuckey (capoeirista)
capoeiristas wearable wireless cameras play outside the house of abolitionist William Wilberforce; video projected on the nearby Rank Hovis building
shows: wall of Rank Hovis Building and on the Timebase Channel, Kingston Interactive cable TV, Hull
commissioned by: Hull Time-Based Arts
www.ambientTV.NET/3/spyschool/2



The Spy School Exercise #3 2002
video shorts for billboards in public space
Marek Kivi, Mari-Liis Raudjärv, Marge Robam, Piibe Piirma, Aino Ingrid Sepp, Kristel Sibul, Jane Suviste (MA students at EKA E-Media Centre, Tallinn)
led by: Manu Luksch & Mukul Patel (tactical media lab)
video works using miniature cameras made during an intensive lab on surveillance and public space
shows: public electronic billboard, EKA building
supported by: E-media Centre, EKA (Eesti Kunstiakadeemia), Tallinn
www.ambientTV.NET/3/spyschool/3



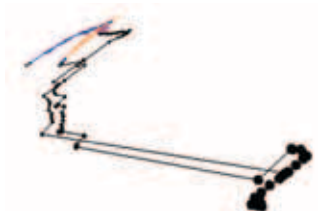
The Spy School Exercise #4: The* Faceless *Project 2002-08
Manu Luksch *et al*
series of works that intervenes in the processes around video surveillance in the UK by invoking aspects of UK and EU law; it includes the Manifesto for CCTV Filmmakers, The Spectral Children, The Eye, Faceless, I wish to apply..., *and* FRAMED; *an online DIY 'toolkit' for obtaining recordings; and an archive of original tapes and discs received from data controllers, letters exchanged, and research documentation*
www.ambientTV.NET/content/?q=faceless



The Spy School Exercise #5: Who is Watching the Watchers? 2004
logotype and limited edition t-shirt
Manu Luksch & Mukul Patel
with: Giacomo (screenprinting)
modified version of the US Defense Advanced Research Project Agency's 'Total Information Awareness' program logo, printed on t-shirts; slogan changed from 'scienta est potentia' to 'quis custodiet ipsos custodes'
www.ambientTV.NET/3/spyschool/5



TRyPTiCHON 1.0 2003
research and development for locative media performance; mixed media (mobile phones, GPS receivers, computers, custom software)
Manu Luksch, Mukul Patel, David Muth
with: Camalo Gaskin, Minna Långström, Gavin Starks, Michael Uwemedimo
location-tagged subjective data from roaming performers rendered graphically at display stations in venue (work-in-progress)
shows: *DMZ Media Arts Festival*, London (2003)
supported by: DMZ Festival, Arts Council England
www.ambientTV.NET/telejam/3/indexdmz.html









TRyPTiCHON 2.0 2004

dance/locative media performance (40 min) in surround audiovisual environment; mixed media (mobile phones and GPS receivers, computers, custom software, multiple projectors, 4-channel sound); documentation video, 4:3 DV (3 min)

Manu Luksch, Mukul Patel, David Muth

with: Hanna Ylitepsa (choreography and dance), Gavin Starks (roaming performer), Camalo Gaskin (costume/tent design); John Hopkins, Nick Grindell, Hermanni Ylitepsa, Voytec Mejor, Mariko Montpetit, Mikko Karjalainen *et al* (roamers)

location-tagged text from a roaming performer is sonified and visualized as architectonic projections in the performance space, to which a dancer responds

shows: *pixelACHE 2004* at Kiasma Theatre (Helsinki)

supported by: *pixelACHE* and NIFCA (Nordic Institute For Contemporary Art) Media Air residency

www.ambientTV.NET/telejam/3/indexpixel.html

Virtual Borders 1999–2003

hybrid media project: temporary media channel; website; documentary film, 4:3 DigiBeta/DVD (91 min)

Manu Luksch

with: Abaw Buseu, Asseu Somsri Dzuebaw Jupoh, Apho Ratanawichaikul; Tarik Thami (streaming); Dr. Leo Alting von Geusau (research adviser); Aju Jupoh, T.J. Rehmi, Mukul Patel (music and sound); Dara Khera, Paul Bucknor (executive producers)

Internet-radio-film convergence project for, with, and about the Akha people of the Mekong Quadrangle

shows (selected): 2004 – Saen Charoen Akha Village, Sirindhorn Anthropology Centre (Bangkok), Switch Media at Chiang Mai Art Museum, Ars Electronica/Radio FRO (Linz), *DIAGONALE* (Graz), School of Oriental and African Studies (London), Goethe Institut (Bangkok); 2005 – Zanzibar International Film Festival, Università degli Studi di Roma 'La Sapienza'; 2008 – desire machine (Guwahati)

supported by: BKA .kunst, silverserver

www.ambientTV.NET/akha/vb

VBI (Voluptuously Blinking Eye) 2006

teletext broadcast studio; participatory space; curated works; talks programme

Manu Luksch & Mukul Patel

with: Rachel Baker, Ilze Black, Tina Hage, Juha Huuskonen, Lektrolab (Emma Davidson & Paul B. Davis) (commissioned/curated by ambientTV.NET)

*open-access teletext broadcasting studio (*Microtel*) and event space (*ambient.lounge*)*

shows: *Satellite of Love* at Witte de With for the 35th International Film Festival Rotterdam (2006)

commissioned by: Witte de With/TENT

www.ambientTV.NET/content/?q=vbi

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Rachel Baker has worked in network art and media culture since 1995, and was a founding member of arts server IRATIONAL.ORG. Notable projects include *Clubcard* (on the loyalty card marketing phenomenon of the mid–90s), *Personal Data Fairy* (interrupting Internet marketing databases), *Art Of Work* (an online recruitment agency for artists), and *Exit Strategy* (an unofficial zine for Eurostar travellers). Her works were most recently shown as part of a touring exhibition curated by Hartware Medien Kunstverein (Dortmund, 2006 and Glasgow, 2007). She has written for *Mute* magazine, *Die Planung*, and for the book *New Media Art: Practice and Context in the UK 1994–2004* (ed. Lucy Kimbell). She is currently Officer for Media Art and the Moving Image at the Arts Council of England.
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John Barker is a professional indexer born in North London. His prison memoir *Bending the Bars* is published by Christie Books, and essays have appeared in *Mute* magazine, *Variant*, *Science as Culture*, *Adbusters*, and *Telepolis*.

Ilze Black is a media arts curator and producer who has been active in and around London and Europe over the last 10 years. Her projects focus on network populism, free wireless, open communities and transnational society. She has produced art events and happenings including *The Piss Factory* (1998 Dazed&Confused, London), *000zerozerozero* (1999 Whitechapel Gallery, London), *Untitled: subvertising session* (2001, Riga), and Interference: Public Sound (2003 East London), and managed projects within the European frameworks *Re_public Art* (2003–04) and *Signs of the Cities* (2007–08). She co–founded the arts bureau OPEN in 1990s post–Soviet Latvia, and the media arts collective TAKE2030 in 2003. A collaborator on ambientTV.NET projects between 2001 and 2002, Ilze currently heads the new media art programme at Watermans, London.

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Growing up in Japan, **Shiho Fukuhara's** main interest was in the linguistic aspects of cultural difference, which she researched while living in Europe for nearly a decade. A keen observer of the science, technologies, cultures, and politics of creative practices, her focus is on the mutual influence of everyday experience and technological development, and the formation of public perceptions of science. Shiho's current work addresses social issues surrounding science, technology and communication by creating alternative conceptual models and strategies. Her approach often takes the form of activities intertwined into existing fabrics such as the biotechnology and water businesses. Her *Biopresence* project (2004), in collaboration with Georg Tremmel, won awards from the London Science Museum, NESTA, and the VIPER media art festival, Basel, among others.
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Peter Grech worked as architectural engineer, draughtsman, production manager, milkman, furniture maker, mirror artist, and welder, before landing a prize job as van driver. A too–intimate knowledge of the traffic jams of London spurred an interest in environmental issues, which he pursued through a Masters Degree in Business and the Environment

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As well as translating regularly for *frieze* and numerous art book publishers, **Nick Grindell** has made English versions of poetry (Monika Rinck, Hendrik Jackson) and plays (Elfriede Jelinek, Gesine Danckwart). In 2003, he edited the three-issue *Abweichende Linienführung* magazine for epram.org on the theme of cartographic freestyle, and in 2004 collaborated with Thomas Goldstrasz on *Ideengänge*, a project paying homage to Heinrich von Kleist in the form of algorithmic walks and their documentation on postcards using text fragments from Kleist's own letters. He recently translated Jörg Heiser's book (*All Of A Sudden: Things That Matter In Contemporary Art*, Sternberg Press) and is currently working on a guide to the animal sculptures of Berlin, where he lives. www.grindell.de

Siraj Izhar's work is the production of cultural processes that create spaces for multiple and complex forms of participation. The projects are at times anonymous and usually take place over three years. Through the 1990s, Izhar's work was presented through his nom de guerre 'strike'. In 1997 he set up the charity strike foundation, which provided different types of workspaces and cells of activity for varied forms of autonomous cultural production in London. The charity was an experiment in modelling a 'factory for integrated social production' by bringing together a mix of artists and social activists. He is presently working on www.xyzlondon.com, a multithreaded process in continual development. One thread is a complementary economy with its own currency for Le Corbusier's Unité d'Habitation in Rezé, Nantes, to be developed in 2008 in collaboration with the Nantes based art & ecology initiative, ecos. Izhar is also due to build a Living Memorial to the Nigerian activist Ken Saro-Wiwa in London, conceived both as a visual landmark and a communication network in public space. s-i@xyzlondon.com

Naseem Khan is a freelance writer and policy consultant, who has lived near Arnold Circus in East London for eight years, and is Chair of the Friends of Arnold Circus. She wrote the seminal study that revealed the extent of cultural work across a spread of migrant communities in the 1970s ('The Arts Britain Ignores'), started a national umbrella body for the voices of those artists (MAAS), was coordinator of the alternative Festival of India and was Head of Diversity at Arts Council England. She also danced in the film *The Long Duel* and ran probably the world's only Pancake Race on skis, in Finland. www.naseemkhan.com

Dara Khera runs the architecture bureau WORK in London. Formerly, he produced music and combined arts events, including the first ambientTV.NET project *Virtual Borders*. In the late 1990s, he co-founded the drum & bass music label and club *Sitarfunk*.

Manu Luksch is an artist/filmmaker who works outside the frame. Through image, performance, installation, and hybrid media work, she investigates the effects of (particularly emerging) technologies on daily life, social relations, urban space, and political structures. Particular zones of focus are the limits of permission and injunction, the thresholds and constraints of public space, and the traces of data that accumulate in digital networked societies. Luksch studied Fine Arts at Akademie der bildenden Künste, Wien and Chulalongkorn University, Bangkok. After assisting Peter Greenaway on exhibitions from 1992–95, she directed the Munich Media Lab, co-curated *Art Servers Unlimited* (the first conference on Internet art), and, in 1999, founded interdisciplinary arts production company Ambient Information Systems/ambientTV.NET. She now lives and works in London with her artistic collaborator Mukul Patel and their son Indigo. www.manuluksch.com

Marion Mayr is a graphic designer based in London and Vienna. Her widely-exhibited projects take multiple forms such as book art, experimental typography and animation, and include: *Dissected Matter* (books, posters, and animation deploying 3-D letterforms based on the Fibonacci series), *The Origin of Letters by Means of Human Selection* (book, x-rays, linen charts, latex and plaster: organic typography, type as a living being), and *A Condensed Universe* (jigsaw puzzle/map of Central London created entirely from letterforms). Marion has worked as freelance art director and designer in London, New York and Vienna for clients

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sometime – psychologist; sometime – community artist
sometime – antique dealer, tourist guide, tel operator, sailor, tennis teacher
sometime – Director: Battersea Arts Centre, Institute of Contemporary Arts (ICA)
sometime – Consultant: Roundhouse, Soros Foundations, Visiting Arts, NESTA, International House
alltime – fisherman, fungi gatherer, tennis player, traveller, cook, father, grandfather

Armin Medosch is a writer, artist and curator working in the field of media art and network culture. In 2007, together with Ina Zwerger, he hosted the theme conference *Goodbye Privacy* of the media arts festival Ars Electronica. He initiated the exhibition WAVES which was first shown in Riga, Latvia, in 2006, and then again at HMKV Dortmund, Germany, in May/June 2008. Medosch has published numerous articles and book contributions as well as two books. Between 1996 and 2002 he was founding editor-at-large of the award winning online magazine *Telepolis*. He was co-founder of *Kingdom of Piracy* (2001), which investigates the relationship between art and intellectual property. Together with the technology development project Hivenetworks, he realised the work *Hidden Histories/Street Radio* in Southampton in 2008. He is currently working on a practice-based PhD at Goldsmiths College, University of London, Digital Studios, for which he researches the relationship between arts and free and open source software and in the context of which he currently builds a collaborative research platform under the title *The Next Layer*.
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Elke Michlmayr is a London-based software engineer and researcher interested in self-organising systems, peer-to-peer systems, and social networks. She holds a PhD in Computer Science from Vienna University of Technology and is currently working on applications for mobile devices.
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Mariko Montpetit trained as a sushi chef in Montréal before studying Fine Art at the Glasgow School of Arts, the University of Applied Sciences in Tampere, Finland, and Duncan of Jordanstone College of Art and Design, Dundee. She works mostly as an editor of documentaries, features, and art films, and is frequently involved in significant collaborations with artists, dancers, filmmakers and theatre directors. Recently she has worked with Collectif Loge 22 (Lyon) and Théâtre de Complicité.
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Mukul Patel's works deploy various and hybrid media (sound, light, language, networks) under formal constraint, in order to develop unique but open and accessible grammars. Sound works range from generative site-specific installations (*phoneme*, *Indian Standard Time*), through sound design for performance (working with Oleg Kulik and Franko B), to composed music for leading choreographers and dance companies (Russell Maliphant, Shobana Jeyasingh, Akram Khan, Le Ballet de l'Opéra de Lyon). Patel studied Natural Sciences and Social & Political Sciences at King's College, Cambridge; mathematics and music were early passions. In the last 15 years, he has been strongly drawn to the work of French literary-mathematical group Oulipo, to 1960s-70s conceptual practice, and above all to Indian art music (especially that of Ustad Ali Akbar Khan), of which he is a continuing student. He codirects Ambient Information Systems with Manu Luksch.
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Keiko Sei promotes independent media, especially in places where such things are scarce. From 1988, she worked in Eastern Europe, Central Asia and the Caucasus region; in 2002 she shifted her focus to Southeast Asia. Her activities include research, seminars, workshops, exhibitions, and writings on independent media and culture in those regions and include: the symposium *The Media Are With Us!: The Role of Television in the Romanian Revolution* (Budapest, 1990), a video program *The Age of Nikola Tesla* (Osnabruck, 1991), video screenings of independent media culture in Eastern Europe for American audiences in 1993 and 2000, the exhibition *POLITIK-UM/New Engagement* (Prague, 2002), and the books *Von der Bürokratie zur Telekratie* (Berlin: Merve Verlag, 1990) and *Terminal Landscape* (Prague: One Woman Press, 2003). Her video archive, which she collected in Eastern Europe and Japan, was presented in 1999 at the Generali Foundation, Vienna. Currently she organizes educational programs on film and video for people from Burma.

Last Mango in Paris is one pseudonym of writer, performer and music producer **Shane Solanki.** As Mr. Sho'nuff, Shane was staff writer for record

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Wolfgang Staehle was born in Stuttgart in 1950 and moved to New York in 1976 to study at the School of Visual Arts, with, among others, Joseph Kosuth, Marshall Blonsky, Robert Mangold, and Jackie Winsor. After a gallery career in New York and Europe in the 1980s, Staehle decided to work collectively, and in 1991 he founded THE THING, an innovative online forum for artists and cultural workers that included the first Web site devoted to Net Art. In 1996, Staehle began to produce an ongoing series of live online video streams. The first of these works was *Empire 24/7*, a continuous recording of the top one-third of the Empire State Building broadcast live over the Internet. This was followed by online streams of other buildings, landscapes and cityscapes such as Berlin's Fernsehturm, the Comburg Monastery in Germany, lower Manhattan before and after 9/11, and a Yanomami village in the Brazilian Amazon. He is represented by Postmasters Gallery, New York.
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Gavin Starks enjoys colliding worlds, exploring links between science, music, technology, and the arts. He founded d::gen network, exequo.org, and amee.cc (the Avoiding Mass Extinctions Engine), and directs Consolidated Independent. He has led diverse projects with the UK Government, Google, Oxfam, Channel Four, EMI, Rolls Royce, Tate Modern, Shell plc, Christian Aid, Glastonbury Festivals and Resonance FM. A key figure in the UK Internet and the streaming media industry, he helped set up Virgin.Net and co-founded the International Webcasting Association in Europe. He has an academic background in Astrophysics and Computer Music, and is a Fellow of The Royal Society of Arts. His spare time is spent on ships at sea.
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Tuomas Toivonen is a founder of NOW, an architecture office in Helsinki that develops solutions for the contemporary condition, from hotels and tableware to prefab houses and urban policy. As artist, Tuomas creates works and publications that challenge perceptions of scale, place and location. He also makes music, and is member of dubrock band Giant Robot and Jori Hulkkonen's 10-piece Acid Symphony Orchestra. He has taught urban planning, spatial design and architecture at Helsinki University of Technology, University of Art and Design and Estonian Academy of Arts.
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Michael Uwemedimo is a writer, curator, and member of the filmmaking collaboration, Vision Machine. Recent writings appear in *Fluid Screens/Expanded Cinema* (University of Toronto Press, 2007), *Building Bridges: The Cinema of Jean Rouch* (Wallflower, 2007), and *Jean-Luc Godard: Documents* (Pompidou Centre, 2006), and the forthcoming monograph, *The Interview* (Manchester University Press). Curatorial projects include *Possessing Vision: The Cinema of Jean Rouch* (ICA, 2000), *Jean-Luc Godard: A Retrospective* (NFT/Tate Modern, 2001), and *After the Fact* (BFI Southbank, 2007). With Vision Machine he has been developing a performance-based historiography of political violence. He lectures in film at Roehampton University. Michael has been playing Capoeira for many years and dances to excess.

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